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ABSTRACT

This paper presents a multi-faceted study of interactions between teachers and children in four first grade classrooms. Research and theory related to teacher behavior, child development, teacher-student interactions, the classroom environment and the social context of schools and communities are reviewed. Previous research which has portrayed the teacher as the central figure in the classroom, as an impersonal machine charged with creating a standardized product and as a powerful judge is discussed at length. Socio-cultural aspects of schools and communities are also emphasized. The two schools chosen for the study represented heterogeneous social and racial populations. Data was gathered over the course of an entire school year and included ethnographic descriptions of the schools and communities chosen, observations of classroom structure, repeated observations of teacher-student interactions, repeated observations of the behavior of specific children, observations of the effect of children's race and sex on teacher-student interactions, and interviews with teachers, administrators, parents and children. Qualitative and quantitative techniques were used for the data collection. Results are discussed in terms of the socio-cultural climate of the schools and the uniqueness of each classroom and teacher. The results emphasize the differences in teacher personality and style which affect the classroom environment and the teacher-student interactions. (BD)

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FINAL REPORT
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FIRST GRADE:
A MULTI-FACETED VIEW OF TEACHERS AND CHILDREN

by

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Table of Contents

Chapter I The Teacher As Central Figure - Sara L. Lightfoot

Chapter II The Social Context of School and Community - Sara L. Lightfoot

Chapter III The Long Search for a Research Sample - Sara L. Lightfoot

Chapter IV The Social Context of School and Community - Sara L. Lightfoot

Chapter V Research Methods - Jean V. Carew

Chapter VI Quantitative Analysis - Jean V. Carew

Summary and Conclusions - Jean V. Carew

Appendices - Jean V. Carew, Gloria S. Chao, Josefa Rosenberger, and Sara L. Lightfoot

A. Teacher-Child Interactions Coding Manual

B. Child-Focused Observation Coding System

C. Supplementary Statistical Information

List of Tables

Chapter V

Table 1 Classroom Observation Schedule
Table 2 Teacher-Focused Observation Variables
Table 3 Child-Focused Observation Variables

Chapter VI

Table 1 Typical Daily Teacher Schedules
Table 2 Activity Contexts
Table 3 Interaction Topics
Table 4 Teacher Behavior. Academic Emphasis and Management Efficiency
Table 5 Quality of Teacher-Child Relationships
Table 6 Child Behaviors
Table 7 Teacher and Child Behavior: Composite Variables
Table 8 Individual Variation in Children's Interactions with Teachers
Table 9 Profiles of Behavior for High Attention Children
Table 10 Race and Sex Differences
Table 11 Race/Sex Composition of Reading Groups
Table 12 Race and Sex of Seat Neighbors and Isolates

Chapter I

The Teacher As Central Figure

The teacher has been the central and dominating figure of classroom research. She has been described as the all-powerful determining force who is there to "make education happen"[1] and her dominance has been affirmed by the theoretical concepts and methodological strategies used by researchers studying classroom processes. Research on teacher effectiveness and teacher expectations have been primary concerns in the literature on classrooms and both have focused on documenting the attitudes and behaviors of the teacher almost exclusively. This focus is not in itself surprising since the explicit purpose of much of this research is to assess the effects of teacher characteristics on student outcomes such as reading or IQ scores. But behind this purpose is a critical assumption that is very much open to question. It is that the teacher is the primary initiator and ultimate determiner of all that happens in the classroom. The teacher is thought to be the only person who "teaches" and the only one who has a significant impact on the child's learning and development. Teaching is seen as a unidirectional process and power and authority as asymmetric forces resting securely in the hands of the teacher. The result is a severely distorted and oversimplified picture of life in classrooms with the teacher standing large and imposing at the front of the room and all activity emanating from or being directed to her.

Closely linked with this view of the teacher as central figure in the classroom is the overriding concern in past research with identifying the teaching techniques that create the optimal child product. The literature is replete with metaphors of industrial efficiency, productivity, technology and standardization, as if children were refrigerators or television sets and all we need to know is whether they work when we plug them in. In this school-as-factory conceptualization, the teacher is seen as manager, or, in less flattering portrayals, as an assembly line worker, and the child as a manufactured item whose quality can be measured by applying standardized tests. The teacher may be held accountable for the child product in much the same way as a garment worker may be held responsible for the cut of a dress. A basic but hidden assumption here is that the teacher follows some standard routine in her interactions with children just as a factory operative follows a set sequence of steps in assembling a machine. At the very least, the teacher is thought to have a characteristic style or pattern of behavior which varies so little from child to child that it can fairly be represented by averaging her responses to the individual students composing her class. This assumption flies in the face of reality. It ignores the wide variation in teacher behavior toward individual children that is often strikingly apparent in classroom observations, the wide variation in the personalities, needs and behavior of children, and also the fact that the former is often contingent on the latter.

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[1] Jerry Farber, Student As Nigger, New York: Pocket Books, Simon and Schuster, Inc., 1969.

Teachers treat individual children differently. They may do so out of dislike or prejudice or they may do so because they perceive them as having different needs, abilities and temperaments. Teachers do not necessarily strive to create the same product with all children nor do they necessarily adopt the same strategies to fashion the product they have in mind. Indeed teachers probably vary greatly in how much influence they think they have on children; in their desire to create a product that is homogeneous and standardized or varied and diverse; in their sensitivity to individual differences in children and in their ability to adopt appropriately different modes of treating them. These sources of variance make it entirely unrealistic to assume as does most research that teachers have typical styles of behavior which they display equally to all their students, or, the implicit corollary, that teachers exert the same impact and influence on all children. In fact, teachers may vary their behavior considerably with different children. These variations may be conscious or unconscious, benign or malicious, discriminating or discriminatory. Whatever their guise, they cast serious doubt on the two basic research assumptions that the teacher is the powerful, primary source of children's classroom experiences and that all children encounter a uniform set of experiences that influence their development in similar ways.

The concept of the teacher as the central actor in the classroom and as the maker of a child product is also clearly expressed in the methods typically used in classroom research. The teacher is nearly always the main subject on whom data is collected and observations or ratings of her behavior are often the primary or only method used to document classroom processes. These procedures are themselves often unsatisfactory even as methods of describing teacher behavior. For example, in studies of teacher effectiveness researchers have employed both high and low inference methods. High inference methods such as rating scales typically require the observer to make large interpretive leaps in judging the teacher's style, personality, or pedagogy. For example, an observer may be asked to rate a teacher as authoritarian or democratic, warm or cold, integrative or dominative merely from observing her teach or interact briefly with children in the classroom. What the observer actually witnesses may be statements such as: "Johnny, give me an 'at' word!" "Susan, stop that silly whispering!" "Tim, you look tired today." But what she is required to rate are stable and general aspects of style or personality such as "warm or cold", "authoritarian or democratic". High inference rating scales encourage so much subjectivity that the scores are likely to reflect more about the observer's perceptions and biases than about classroom realities. The forced choices that such scales often demand (e.g. warm-cold, traditional-open) may also compel the rater to think in terms of jargonized, good-bad dichotomies and may serve to degrade the observer's perceptions which may in fact be more precise and subtle than the scale allows.

The obvious subjectivity, unreliability and crudeness of such rating scales have led many investigators to turn to alternative, low inference methods. These methods typically require only the counting of discrete, directly observable behaviors, ostensibly keeping interpretation, intuition and judgment on the part of the observer to a minimum. Using prescribed behavior categories, an observer may record the number of times the teacher praises the child, gives negative reinforcement, provides feedback and so on, or, if such categories are regarded as still too inferential, she may limit herself to counting the number of times the teacher smiles or frowns, says "correct" or "incorrect" etc. Unfortunately, behavior counts, although usually more objective and reliable than high inference ratings, may also grossly misrepresent the behavior and influence of teachers. To put it crudely, only those behaviors that can be counted easily and reliably tend to be recorded in these observation systems. But countable actions are not necessarily significant ones nor are significant behaviors necessarily countable. It may be that many aspects of teacher communication that are subtle, fluid, and difficult to measure reliably represent the more interesting and crucial dimensions of teacher-child relationships. Indeed there is some evidence indicating that ratings of teacher characteristics that are less closely linked to actual, discrete behaviors are more predictive of child outcomes than are counts of specific behaviors (Rosenshine and Furst, 1973).[2]

In sum, the research literature on teacher effectiveness places the teacher in a falsely central and unilateral role. It tends to focus exclusively on behaviors initiated by the teacher or directed by children to her as if behaviors initiated by children but not addressed to the teacher and interactions among children were unimportant. It tends to describe teacher behavior in assembly-line terms as if the teacher typically treats individual children so similarly that her average behavior toward all children in her class fairly represents her typical behavior toward each individual child. In so doing the approach ignores the wide variation in the teacher's behavior with individual children, the wide variation in the behavior of children, and the fact that the teacher's and children's behaviors are often mutually contingent. Teachers consciously or unconsciously differentiate their behavior in response to variation in children's abilities and needs, thus allowing children to influence their treatment of them. Brophy and Good (1974) aptly point out that, given the large number of students, rapid pace of events, and the fact that many activities are usually going on simultaneously in the typical elementary classroom, much of the teacher's behavior is necessarily reactive to student behavior rather than proactive. The power and influence of such a teacher is not properly appreciated if we insist in thinking about her as determining most events in the classroom and as acting in a uniform manner with all children rather than as reacting to children's behavior and interacting with them in individually diverse ways.[3]

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[2] B. Rosenshine and N. Furst, "The Use of Direct Observation to Study Teaching", in Second Handbook of Research on Teaching, R. Travers (ed.), Chicago: Rand McNally & Co., 1973.

The Teacher As Powerful Judge

The second major focus of classroom research -- the self-fulfilling prophecy -- further exaggerates the teacher as an overpowering, even malicious figure in the classroom. This research has been primarily concerned with documenting the strong relationship between the teacher's expectations of a pupil's academic performance and the actual performance of that pupil. More broadly, researchers have traced the powerful effect that a teacher's conscious and unconscious values, attitudes, and expectations towards students have on her classroom behavior and teaching style and subsequently on the academic and social achievement of her pupils. Although a few investigators have recognized the potentially positive

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3. J. Brophy and T. Good, Teacher-Student Relationships: Causes and Consequences, New York: Holt, Rhinehart and Winston, 1974.

impact of teacher expectations, much of the research on the self-fulfilling prophecy in education has come to have predominantly negative connotations. The teacher is seen to be an all-powerful being who determines the life chances of her defenseless children, sometimes making the critical judgments in the first few hours of the school year.

In his attack on the all-encompassing power of the school in an industrial society, Ivan Illich discusses the impact of the professionalization of the teacher's role. He claims that teachers now have exclusive power to decide whether a child has shown a sufficient degree of mastery. These judgments by teachers are not limited to evaluations of the academic and conceptual skills of the student, but encompass a wide range of child characteristics enabling the teacher to become custodian, master of ceremonies, preacher, and therapist as she controls and manipulates the psycho-social and motivational aspects of the child's life.[4]

Few social scientists are as passionately opposed to the assymetric power of teachers and children within schools as Illich, but many have focused their attention on teachers as the primary judges of deviance and on the forces that shape their judgments. These judgments, in turn, influence the social and cognitive learning that is consciously or unconsciously transmitted to pupils. For example, in his study of classroom interaction patterns, Jules Henry (1957) claimed that the significant aspect of teacher-child communications is the transmission of value orientations from teacher to child. The learning of values does not necessarily proceed through didactic teaching but through systems of reward and punishment. The values that are transmitted depend on the teacher's value orientation, which in turn is determined by her social class identification.[5]

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4. Ivan Illich, Deschooling Society, New York: Harper and Row, 1970.
5. Jules Henry, "Attitude Organization in Elementary School Classrooms", American Journal of Orthopsychiatry, 27: 117-133.

In a study based on interviews with large numbers of teachers in Chicago, Howard Becker (1952) analyzed the responses of teacher to children from different social class backgrounds. Becker claimed that the teacher's perception of the child's ability to do school work determined her actual teaching techniques.

> The teacher expects that the amount of work and effort required of her will vary inversely with the social status of her pupils.. Such consequences of the teacher's differential reaction to various class groups obviously operate to further perpetuate those class-cultural characteristics to which they object in the first place.[6]

In this very perceptive study, Becker was vitally interested in the motivations behind the discriminatory behavior of teachers. He recognized the profound impact of the teacher's self-image on her perceptions of children. Not only did middle-class teachers find it difficult to develop effective pedagogical strategies for translating intellectual content to lower class children, not only did teachers have a hard time disciplining such children, but they also seemed deeply offended by them. "In terms of physical appearance and condition lower class children disgust and depress the middle-class teacher." On the other hand, the responsiveness and similarities of middle-class children to themselves made the teachers feel successful and rewarded in their work and increased their self-esteem as competent professionals. The actions, behaviors, and values of middle-class children were familiar, non-threatening, and anticipatable while lower-class children were viewed as disruptive and threatening aliens. Becker perceived that teachers have human needs for support and reinforcement and if they are deprived of these, they are likely to project their negative feelings onto their less powerful students. The teacher's feelings and perceptions about the abilities of children in her class are largely a reflection of how successful she feels at making them learn. In focusing on the teacher as a whole person with her own needs, Becker began to uncover some of the intrapersonal and inter-

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6. Howard Becker, "Social Class Variation in Teacher-Pupil Relationship" Journal of Educational Sociology, 25: 451-465.

personal roots of teacher attitudes and behavior and the complexities of classroom processes.

Pygmalion in the Classroom, by Rosenthal and Jacobson, is probably the best known experiment on teachers and children in classrooms. When the data were published in 1968, teachers were suddenly struck with their own sense of power and irreversible influence, parents feared that their children would be labeled losers and doomed for life by careless or hostile teachers, and researchers marvelled at the dramatic documentation of the expectation effect. Although the authors' claims have been somewhat modified by more recent analyses of teacher expectations, the historical and symbolic importance of this study still remains with us today.

The experiment took place in a public elementary school in a lower-class, medium-sized community. Rosenthal and Jacobson wanted to test the proposition that favorable expectations by teachers could lead to an increase in the intellectual competence of children. The predictions were allegedly made on the basis of these special children's scores on a test of "academic blooming". About one fifth of the children in this school were alleged to be potential bloomers. In actuality, the names of the special children had been randomly chosen and bore no relation to their actual abilities. "The difference between the special children and the ordinary children, then, was only in the minds of the teachers."[7]

The IQ tests given to children at the end of the school year revealed that students whom the teachers were led to believe would "bloom" in the academic performance actually did score higher on standardized tests than other students. In addition, children who were expected to bloom intellectually were rated by teachers as being more intellectually curious, as happier, and as less dependent on social approval and reinforcement from teachers. The only plausible explanation the authors could advance for these findings was the differential treatment by teachers of students for whom they had different but false expectations. Rosenthal and Jacobson did not observe the teachers' behavior so they could only speculate on how teachers brought about these differences in children's intellectual competence.

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[7] Robert Rosenthal and Lenore Jacobson, Pygmalion in the Classroom, New York: Holt, Rinehart, and Winston, 1968, p. 175.

> To summarize our speculations, we may say that what she said, and how she said it, by her facial expressions, postures, and, perhaps her touch, the teacher may have communicated to the children of the experimental group that she expected improved intellectual performance. Some communications together with possible changes in teaching techniques may have helped the child learn by changing his self-concept, his expectations of his own behaviors, and his motivation, as well as his cognitive style and skill.[8]

The Rosenthal and Jacobson research, with its clear and dramatic evidence, created a great clamor in the education world. Some researchers feared the uncritical acceptance of the study's results by the public and worried that people would believe in the automatic, universal impact of the self-fulfilling prophecy in all classrooms at all grade levels. Robert Thorndike complained, "In spite of everything I say, I am sure it (Pygmalion in the Classroom) will be a classic widely referred to and rarely examined critically."[9] And Richard Snow concluded after an extensive review of the study that "Pygmalion inadequately and prematurely ... has performed a disservice to teachers and schools, to users and developers of mental tests and perhaps worst of all, to parents and children whose newly gained expectation may not prove quite so fulfilling."[10]

These extreme criticisms by researchers pointed up the more moderate concerns of many educators who responded to the experimental results with mixed amazement and skepticism. Most people were willing to accept the basic premise of the self-fulfilling prophecy (i.e. that when we have high expectations of children, they are more likely to thrive than when we have low expectations of them), but it was difficult to imagine that the achievement of children, regardless of their abilities, could be completely shaped and transformed through teacher expectation. Despite the sophisticated research techniques and statistical analysis used by Rosenthal and Jacobson, the process of changing a child's competence and self-image was obviously more subtle and complex than that portrayed by the authors. Researchers, teachers, parents and laymen voiced many concerns and questions about the process and dynamics of teacher-child interactions that produced these dramatic results. Pygmalion in the Classroom had given an incomplete vision of the self-fulfilling prophecy at work - one that emphasized the final child product but did not reveal the process of transformation, accommodation and change experienced by the teachers and children in the classrooms during the school year.

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[8] Ibid., p. 180.

[9] Robert Thorndike, "Review of R. Rosenthal and L. Jacobson, Pygmalion in the Classroom", Educational Research Journal, 5: 708-711, 1968, p. 708.

[10] Richard Snow. "Unfinished Pygmalion", Contemporary Society, 14: 197-199, 1969.

In 1970, Brophy and Good explored the processes of interaction and transformation within classrooms that might create the self-fulfilling prophecy. They were interested in documenting the ways in which differential expectations are communicated in teacher-student interactions. The teachers of first grade children were asked at the beginning of the school year to rank their students in order of their academic achievement and this ranking constituted teacher expectancy. The six students ranked highest formed the high achievement group, and the six ranked lowest formed the low achievement group. Brophy and Good found that high achievers sought out their teachers and initiated interactions more frequently than low achievers; teachers criticized the low achievers more; teachers gave feedback more frequently to high achievers and were more persistent in eliciting responses from them; and high achievers scored better on standardized tests at the end of the year. The authors concluded that teacher expectancy predicted objective measures of classroom performance, objective achievement test scores, and rates of teacher praise and criticism.[11]

It is important to note that Brophy and Good's operational definition of teacher expectations is quite different from Rosenthal and Jacobson's. In the latter research teachers are asked to accept an expert's judgments of the children's intellectual abilities (to accept fictitious test scores as valid predictors of their competence) whereas in the Brophy and Good study they are asked to give their own expectations of children's abilities which may have been based on perceptions of real differences among children that were apparent even in the first few weeks of school. Thus Brophy and Good's observations of differential treatment of children whom teachers initially judged to be high and low achievers do not necessarily explain the Pygmalion effect. Expectations induced by relying on the word of experts may have different consequences in the classroom than expectations that teachers arrive at for themselves.

Brophy and Good's observational instrument marks a critical breakthrough in the documentation of classroom processes. In much of the previous observational research, observers had described the teacher's behaviors in relation to the class as a whole. For instance, teacher effectiveness studies had rated the teacher as "warm" or "cold" in her interactions with the class as an undifferentiated group. Teacher characteristics were then correlated with class mean scores on standardized achievement tests. Treating the class as an undifferentiated group conveyed the misleading impression that the teacher responded in the same way to all children. The data did not reveal discriminations in the teacher's relationships with children nor reflect the unique experiences of each child in the class. Using a dyadic approach, Brophy and Good were able to record individual interactions between teacher and children and offer a far more differentiated and authentic picture of classroom processes.

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[11] J.E. Brophy and T.L. Good, "Teachers' Communication of Differential Expectations for Children's Classroom Performance", Journal of Educational Psychology, 61 (5): 365-374, 1970.

That teachers behave differently toward students whom they perceive as differing in academic potential is a highly plausible hypothesis about real life classroom experiences although most subsequent studies have failed to confirm the experimentally induced "Pygmalion Effect". A related question is how these expectations are formed and internalized by teachers in the first place. It is not surprising that two of the factors so far alleged to be determinants of teacher expectancy of student ability are social class and race. Rist clearly demonstrated this relationship in his report of observations made in an all-black ghetto school (the teachers were black as well). On the eighth day of kindergarten he observed the teacher segregating her students by tables, apparently defining the groups by social dimensions such as the children's physical appearance, interactional behavior, use of language, and family socio-economic variables. She labeled one group "fast learners" and the other "slow learners" and then proceeded to discriminate systematically in favor of the first group and against the others. The fast learners received much more encouragement, praise and instruction, and privileges from her, while the slow learners were far more often controlled and ridiculed. Moreover, the children themselves internalized the teacher's invidious comparison, the fast learners adopting her tactics of belittlement and contempt toward the slow learners, the latter deflecting their resentment and shame from the aggressors onto each other. Rist demonstrated that the teacher's initial expectancies and consequent discriminatory patterns of behavior not only profoundly affected the students' academic performance throughout the kindergarten year, but worse, that they provided teachers in the later grades with "objective" evidence which became the basis for further discrimination. It is not far-fetched to conclude that these children's chances for academic and occupational success were substantially set in the first eight days of school.[12]

Rist's study made a significant contribution to the literature on classroom processes because it provided an analysis of critical factors in the teacher's development of expectations and documented the process by which expectations influence the classroom experience of teachers and children. Rist's observations also underscored the need to consider expectations that children have of one another. In this study the teacher's expectations were mirrored in and magnified by the behavior and attitudes of children in the classrrom, but it is also conceivable that children might reject their teacher's judgments and engage in behaviors that conflict with hers. If one is to understand the impact of teacher expectations, one must also explore the complicated network of relationships among children.

In Teaching and Learning in City Schools, Leacock was interested in examining the teacher's assumptions about desirable patterns of socialization for children from different backgrounds. She observed fifth grade classrooms in middle and low income black schools and contrasted the teacher attitudes and behavior within these schools. In comparing white and black schools, Leacock found a marked difference between teacher attitudes and behavior with regard to organizing the classroom for leadership and responsibility. The teacher in the middle-income white school had high expectations and placed a strong emphasis on student independence and self-reliance (although the responsibility given was clearly nominal and often superficial). In the low-income black school, Leacock found a more relaxed and cooperative atmosphere, but an emphasis on discipline and obedience and a lack of academic expectations or explicit learning goals. In explaining the differences in the teacher's attitudes and aspirations, Leacock raised the important issue of the effects of the school and community environments on interactional patterns within classrooms. In the anthropological tradition, Leacock asserted that we must not view teacher expectations as isolated phenomena that relate only to interactions between the teacher and the child.[13]

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[12] Ray C. Rist, "Student Social Class and Teacher Expectations: The Self-Fulfilling Prophecy in Ghetto Education", Harvard Educational Review, 40 (3): 411-451, 1970.

> ...The way the teacher structures both her relations with the children and their relations with each other sets up a behavioral model for them, the implications of which extend far beyond the classroom. To some extent the goals she states for children and those she implies through her management techniques relate to her individual style, but for the most part they must conform to school patterns which, in turn, relate to general social expectations.[14]

Expectations pervade the entire school population and researchers must seek to identify how the social and behavioral norms found in schools influence the individual teacher's conception of the ideal and successful student and shape the interactional patterns within classrooms.

This review of research is not meant to be an exhaustive account of the literature on classroom processes but serves to identify studies that have offered different conceptual perspectives on teacher-child interactions. For instance, Becker's work is important in its recognition of the teacher's needs for positive self-esteem and feelings of competence, and the negative and pejorative projections she often makes onto children when she is feeling threatened or unsuccessful with them. Brophy and Good offer an observational approach that records classroom processes, focuses on individual interactions of teachers and children, and documents the differential experiences of children in the classroom. And Leacock gives a much broader perspective to the study of classroom processes by referring to the powerful impact of social context variables. Teachers do not act in isolation (even behind classroom doors), but are greatly influenced by the norms, values, and culture of the school and community that surround them.

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[13] Eleanor B. Leacock, Teaching and Learning in City Schools, New York, Basic Books, 1969.

[14] Ibid., p. 117.

After reviewing the dozens of studies on teacher expectations that have accumulated since Pygmalion in the Classroom, one must agree with Brophy and Good (1974) that this research has raised many more questions than it has answered. The original Rosenthal and Jacobson's findings on the effects of teacher expectations on student outcomes have never in fact been fully replicated. Results seem to depend on a large number of variables including when and how the teachers' expectations are formed (whether experimentally induced or naturally arrived at); the kind of evidence that is supplied or used in forming these expectations, and how consistent these are with later observations of students in the classroom; various teacher characteristics including aspects of personality, coping abilities, defense mechanisms, values, objectives, experience, competence and role definition; various student characteristics including race, sex and age and also classroom behaviors that confirm or contradict teacher expectations and behaviors that reward the teacher in her interactions with students; and various combinations of teacher, student, and classroom characteristics that encourage the teacher to be relatively proactive, reactive, or over-reactive vis-à-vis individual pupils. As Brophy and Good wisely point out, teacher expectations -- judgments of students' abilities and personalities -- are normal, ubiquitous, many-sided and necessary. Teachers typically form impressions of individual students within a few days or weeks of school and these impressions vary in elaborateness, in the particular dimensions considered salient, in their openness to change in the face of later, contrary evidence, and most important in how teachers act upon them. Teachers vary in whether or not they are likely to act so as to fulfill the prophecies implicit in negative judgments. Some are challenged to reverse these judgments through special intervention; others react simply in accordance with student behavior that is consistent with the judgment; others overreact, as if exaggerating the initial judgment and treating the child in question more negatively than his behavior warrants. Only in the latter case can the teacher be truly said to be bringing about a self-fulfilling prophecy. Which teachers are prone to do this, why, and with respect to what types of students is a research question that needs to be seriously investigated.

The Child as Initiator and Creator

The lives of children have been significantly absent from the studies on classroom processes. Since schools and classrooms are settings that are created as special places for child learning and growth, it is very strange not to hear the voices of children in the research literature. Throughout the research, we hear about children through class mean scores on achievement tests. Not only is our vision of children limited to results of narrowly constructed standardized tests, but we are rarely given any information on the individual child.

Class means mask individual differences. Research findings on ability grouping, for instance, show that it is virtually impossible to create homogeneous groups of children. If children are selected to be homogeneous on a single variable such as achievement, reading scores, or IQ, they are found to vary widely on other social, psychological, and intellectual dimensions. Even if one focuses solely on the variable on which the children were homogeneously selected, their differential rates of growth and development create variation on this dimension after a few months of school.[15] It is a distortion of reality, therefore, to represent children's learning in terms of class means on standardized tests. Children possess different constellations of abilities that cannot be captured by an aggregate score; neither can patterns of learning be captured by summary, end-of-the-year scores on standardized tests.

Not only does research on classrooms neglect individual differences among children in ability and learning styles, it also fails to record the children's responses to the classroom environment. Student gain scores tell us nothing about the children's perceptions of the learning experience, their views of the teacher, or their accommodation to the social context. We do not know how the children perceive the environment, nor do we get any sense of what they perceive as salient and important. Intuitively, we all recognize that our retrospective view of our early school experience evokes particular events. Those special moments capture our memories--not necessarily the repetitive patterns of interaction that we experienced daily. The frequencies of certain kinds of interactions may not determine their relative importance to the experience of a child.

In probing the complexities of teacher-child interactions, it is also crucial to recognize that all children in a classroom do not share in a common experience. In an interesting observational study, Philip Jackson and Henriette Lahaderne warn observers about the dangers of perceiving the classroom experience as one that is shared by all children equally. The authors recorded the differential interactions of teachers in four sixth grade classrooms:

> ...The findings reveal a range of differences in each classroom broad enough to weaken any hopes of making facile generalizations about what goes on there. In each classroom there are a few students who are almost always out of the teachers range of vision, so to speak, and a few others who are almost always underfoot. What this difference means and how it comes about is anybody's guess,

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[15] W.C. Olson, "Grouping and Growth Theory", in Alfred Yates (ed.) Grouping in Education, New York: John Wiley and Sons, 1966.

> but it is fair to conclude that by the end of the year some students likely will be more familiar to the teacher than will others, even though they have all lived together in the same room for about the same number of days. This observation calls into question the conventional view of looking upon each classroom as a unit whose participants have shared in a common educational experience. In a sense, each classroom contains as many environments as it does pairs of eyes through which to view them.[16]

Interaction and Negotiation between Teacher and Child

Teacher expectations are not formed in a vacuum. In a recent paper, Ray Rist emphasizes the need to consider even the labeling of children as an interactive process that implies behavior and choices by both teachers and children. Labeling is a social process in which individuals are involved in negotiating, rejecting, accepting, and modifying each other's perceptions. "For expectations to become realized, both teacher and student must move towards a pattern of interactions where expectations are clearly communicated and the behavioral response is consonant with the expected pattern."[17]

This point is well illustrated by Brophy and Good's (1974) description of the characteristics of four groups of students whom teachers tend to perceive very differently. These are labeled "attachment", "concern", "indifference", and "rejection" students, the labels referring to the feelings teachers report about the four groups. Attachment students are model students academically and behaviorally. They reward the teacher by conforming to her ideal of a good student. Concern students are typically weak academically and very dependent on teachers; they reward the teacher by frequently asking for her help and providing her with evidence that this help is beneficial. Indifference students are typically no weaker than concern students academically but their passivity, unresponsiveness and apparent lack of interest in the teacher's overtures "turn her off". Rejection students are often students who are academically able but present behavior problems. They may seek the teacher's attention no more than concern students but do so in ways that teachers dislike. This group is the one most likely to be victims of teacher action leading to self-fulfilling prophecies. Teachers tend to underrate their academic abilities and exaggerate their misbehavior and consequently to overreact to their objective characteristics.

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[16] Philip Jackson and Henriette Lahaderne, "Inequalities of Teacher-Pupil Contacts", Learning in Social Settings (eds. Matthew Miles and W.W. Charters), Boston: Allyn and Bacon, 1970, p. 103.

[17] Ray Rist, "Becoming a Success or Failure in School: A Theoretical and Methodological Synthesis", unpublished paper, 1975.

It is true that teachers and children are not equally powerful. Children do not have an equal chance to determine the nature of their school environment or shape the substance of their curriculum. But children do have very subtle and sophisticated ways of denying categorization and defying labels. It is misleading, therefore, to describe teacher expectations as unidirectional or totally controlled by the teacher. Expectations, even prophecies, develop out of interactional experience and research must document the behavior of both actors in the process: teacher and child.

Besides analyzing the child as an important contributor to his own experience, it is also important to recognize that children are individuals with different talents, skills, needs, and desires. Teachers who respond differentially to children are often reacting to differences in the perceived needs of the child. In fact, one of the hallmarks of good teaching is learning to diagnose individual needs of children and offer attention and reinforcement that corresponds to those needs. Teachers must discern differences among children in order to do their job effectively.

In addition to tailoring her responses to the individual needs of children, the teacher is also likely to develop "special" relationships with individual children in the class--relationships of greater intensity, commitment, and depth. The special quality of this relationship may be reflected in the teacher's giving the child more attention, more positive reinforcement, more privileges and affection, but the relationship itself may depend on complex and subtle matches between the personalities, styles, values, and histories of teacher and child. It would be unrealistic to expect that even the most reflective and sensitive teacher would develop relationships of equal intensity with all the children in the classroom. Building and sustaining human relationships is a complex and dynamic process that requires a great deal of commitment and energy on the part of both participants. Rather than developing equal and similar relationships with all children, it is more likely that the teacher will feel closer and more committed to a few children - often children who have pursued and initiated contacts with her or worked hard at becoming the focus of her special attention and favors. The teacher's relationships with "special" children should be viewed as one of the inevitable consequences of a single person relating to a large group of persons (i.e. the limits of individual energy and the unique dynamics of deep commitment), and not necessarily perceived as dysfunctional to the creation of a just and comfortable classroom environment.

Finally, the development and pattern of interactional processes between teachers and children cannot be revealed in a single observation. Actions and reactions must not be seen as isolated events in the classroom but must be viewed as part of a pattern and constellation of behaviors that evolve over time. It is misleading, therefore, for an observer to evaluate the social meaning of an isolated behavior in the classroom. One cannot, for instance, judge a teacher to be cold and heartless just because she is observed harshly scolding a child for leaving his seat. Neither can we view her goals as positive and nurturant just because her behavior seems immediately rewarding to the child. Education is a cumulative, changing, and transforming process that cannot be captured by a single behavior snapshot. In order to interpret a specific teacher's behavior responsibly, the observer needs to know more about the history of interactions that preceded the behavior, the cognitive and social needs of the child with whom the teacher is communicating, and the teacher's perceptions of the social structure of the classroom.

The Impact of Social Context on Teacher-Child Interactions

Although several studies of classrooms point to the fact that teacher behavior is shaped by the culture and organization of the school, very few have sought to describe the social contexts which surround the interactions of teachers and children in classrooms. Leacock's study, described above, claims that *school effects* are more critical than *teacher effects* in determining the quality of life in classrooms. Her research is unique in its systematic exploration of the structure and dynamics of the social contexts that influence the individual behaviors and attitudes of teachers and children. For the most part, classroom research has given a very limited definition to social context--one which defines the focus of the activity being engaged in (work-related context, procedural context, behavioral context) or the number of people engaged in the work (individual seat work, small group, lecture). Researchers have also referred to *serial context*, an observational strategy that records more than isolated and discrete teacher emissions by encompassing the sequence of extended interactions or episodes (i.e., teacher question - student response - sustaining or terminal feedback from the teacher).

Both of the above definitions of social and serial context are useful and provide more information about the quality of interactions. But these definitions give only a partial and narrow image of social context. Even if one chooses to focus on the quantity and quality of teacher communications and their impact on student achievement, one must be cognizant of the institutional and structural forces surrounding teachers and children that limit and shape their behaviors. We do not wish to imply that researchers should not focus on the individual actions and behaviors of teachers, only that we should recognize the interactions of individuals as being dramatically influenced by the setting. There are at least three contextual layers that need to be considered as influential to teacher behavior: the classroom social structure, the school as a social system, and the socio-political forces of community and society.

In an insightful book by Philip Jackson, for instance, we find a description and analysis of the classroom as a social system that presents children with a unique set of influences that require accommodation and change. Children must learn to adapt to crowds, praise, and power.[18] The early work of sociometry described the powerful impact of the classroom social system, patterns of interaction and hierarchical social networks that developed over time.[19] Robert Dreeben, in the structural-functional tradition of sociology, refers to the normative outcomes of schooling that are adaptations to the norms, values and exigencies of the classroom context.[20] Dreeben argues that although school systems are bureaucratically organized, the work of teachers in classrooms is largely independent of administrative direction or supervision. The main work of teachers is to elicit from students compliance with, participation in, and commitment to rules and goals of a school which they attend involuntarily. Specifically the teacher has to develop strategies for implementing her instructional plan, maintaining order, and responding to individual needs of many children, of varying ability, in a small space and often with inadequate inducements at her disposal. Teaching is for the most part a solitary and play-it-by-ear occupation. Unlike many other professionals, teachers do not have a strong craft tradition, a highly developed technology, or a set of occupational guidelines based on collective experience to enable them to cope with or evaluate their work. The rapid pace of classroom events, the simultaneous nature of many ongoing activities and the sheer numbers of children may allow the teacher little time for diagnosis, or evaluation or reflection. One way of adapting to the situational demands of the classroom is to keep talking, lecturing, demonstrating, questioning. Another is simply to react to events as they unfold, abandoning the role of initiator and shaper of student behavior.

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[18] Philip Jackson, Life In Classrooms, New York: Holt, Rhinehart, and Winston, 1968.

[19] J. Criswell, "Social Structure Revealed in Sociometric Tests", Sociometry, 1939, 11, pp.69-75.
B.L. Neugarten, "Social Class and Friendship Among School Children", American Journal of Sociology, 1946, 51, pp. 305-313.

[20] Robert Dreeben, On What Is Learned In School, Reading, Mass.: Addison-Wesley, 1968. Also, "The School as a Workplace", in Second Handbook of Research on Teaching, R. Travers (ed.), Chicago: Rand McNally & Co., 1973.

Schools can also be influential social systems. Much of the literature on teacher socialization refers to the behavioral constraints and limits that impinge upon the teacher or the institutional norms and culture that influence her patterns of behavior. As early as 1932, Willard Waller referred to the "organismic" environment of the school. The school has a dynamic life of its own that shapes the lives of the people inside.[21]

The forces of the socio-political structure of community are the most elusive and encompassing in their impact on within-school interaction patterns. One can see these forces at work most dramatically during times of crisis in the community. (The recent desegregation struggles in Boston took prominence over the events of classroom life.) But one also recognizes the power of these social and economic forces in the works of Christopher Jencks[22] or the radical economists, Bowles and Gintis, who stress the meaninglessness of school achievement and focus on the structural inequities of the economic system in this society as determinants of the child's life chances.[23]

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[21] Willard Waller, Sociology of Teaching, New York: John Wiley and Sons, 1932.

[22] Christopher Jencks, Inequality, New York: Basic Books, 1972.

[23] Samuel Bowles and Herbert Gintis, Schooling in Capitalist America, New York: Basic Books, 1976.

Once again, the recognition of social context does not mean that teacher-focussed correlational studies or teacher-child interactional observations should be wholly recast or rendered invalid. These more microscopic analyses are critical to our understanding of the subtle behavioral and attitudinal transactions within classrooms. It is important, however, that researchers who are engaged in recording teacher-child interactions be aware of the various contextual layers that surround and shape those interactions. This recognition of the powerful impact of social context may influence the variables that we perceive as salient within classrooms and may give some perspective on the importance of ethnographic and observational studies to our understanding of teaching and learning in schools.

The Teacher As Knower

Although the research reviewed so far offers diverse and creative perspectives on teacher-child interactions, one still gets the sense of the teacher as a behavioral, non-reflective being who acts without critical thinking or conscious deliberation. The two converging images of the teacher as powerful and the teacher as mindless produce a view of her which is potentially very threatening.

For a long time, clinicians have been very interested in understanding the motivational roots of human behavior. In the psychoanalytic tradition, they have probed the personal histories of people in an attempt to better interpret their present behaviors. Ironically, most educational researchers have neglected to recognize and document the psychodynamic origins of behavior but have followed the behaviorist model of looking only at visible and countable behaviors. (One exception to this tradition is the work of White [1969].)[24] They have been content to represent life in classrooms by describing actions and interactions and in the process they have often ignored the character, motivations, attitudes, and values of the people who are acting. Using the behaviorist model, teachers are thought of as one-dimensional human beings whose behavior is controlled and modulated by patterns of reward and punishment. More specifically, teachers are viewed as technicians who perform specific and deliberate actions on children who in turn are seen as essentially passive beings to be shaped and controlled by powerful adults.

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[24] W.F. White, Psychosocial Principles Applied to Classroom Teaching, New York: McGraw-Hill, 1969.

For the most part, the literature on classroom products and processes adheres to this behaviorist orientation. Even those observers who have been interested in documenting the details of teacher-child interactions have not sought to describe and analyze the forces within the teacher and surrounding the teacher that shape the way she differentially responds to children. It is therefore not surprising that although the teacher is regarded as an all-powerful actor and judge, virtually the maker and breaker of children's lives, very little attention is paid to what she thinks about her students, about her behavior towards them, or about the reasons, motives or purposes governing her actions. Even in the literature on teacher expectations where artificially induced changes merely in the teacher's perceptions of children allegedly have momentous consequences, one can find very few studies in which the teachers in question were asked to discuss what they thought of children for whom they had differential expectations and how these expectations might affect their own behavior. Yet we suspect that for one teacher, information from an expert that a child is a low achiever may be a challenge to work harder at teaching, motivating or disciplining him; for another it may be an excuse to give up; and for still a third it may be irrelevant, meaningless, useless, or invalid. We cannot know how such information is regarded unless we ask teachers. Scrutinizing only their behavior is insufficient because the same behavior can be governed by quite different reasons, motives or purposes, and conversely, radically different teacher behaviors can be undertaken for the same reasons, motives and purposes. Thus, it seems to us only fair and sensible to find out what these are before we judge a teacher as more or less sensitive, more or less skillful, or more or less effective.

Researchers deprive themselves of a most important resource for understanding classroom processes when they ignore the motivations, forces and thinking behind teacher behavior. Teachers are the most profound and experienced knowers of the classroom scene and their perceptions and reasoning should be an integral part of research. Teachers have a unique, insider's view into what is going on in the classroom and this view is at least as valid, interesting and essential to understanding the educational process as an outside observer's.

Many aspects of what teachers know need to be considered. First of all, we need to find out what teachers know and think about the children in their class. How do teachers perceive their pupils? On what are these perceptions based? How do teachers acquire the relevant information? What sources are used? How quickly are initial judgments formed? How open are they to later elaboration or change? What effort does the teacher make to verify her judgments, say, by observing the child in a variety of contexts or checking her opinions with others? How differentiated are the teacher's perceptions of children? Does she apply only a few gross categories or does she make subtle, complex discriminations? Does she pay attention to social and emotional functioning or mostly to intellectual and academic performance? How do social class, racial and gender characteristics influence her judgments? Are her opinions reasonable and justifiable or are they secret, vague, stereotypic or irrational?

We also need to find out what teachers know and think about themselves. What do they see as their strengths and weaknesses? What are their values, beliefs and pedagogical priorities and objectives? How are these related to their life histories, experiences and training? How self-critical are teachers? How inclined are they to scrutinize their own behavior, to assess themselves, to question their beliefs, to probe their own motives?

Finally, we need to examine the relationship between what the teacher thinks and how she acts. What range of characteristics or behavior on the part of children is considered valuable, acceptable and not in need of change? Having perceived a child as having certain characteristics she wishes to develop or change, what does the teacher then do? What actions on her part are considered warranted and appropriate? How does the teacher check to see whether or not the strategies she uses to bring about change are successful? If there are conspicuous differences in her treatment of individual children, is she aware of them? If so, how does she justify these differences?

These are some of the questions that we shall explore in this research when we consider the teacher as a thinking, reflective human being whose perceptions, ideas and reasoning are indispensable to understanding and interpreting what we observe in classrooms.

The Nature of Objectivity in Classroom Research

From the discussion thus far, it is evident that we do not view research as a mechanical or transparent process. Researchers are not merely the lens of a camera, they are selective interpreters of the classroom scene. No matter how quantitative and objective the research strategy appears, there is a point when researchers offer their interpretations, use their intuitions, and are guided by their values. Research, therefore, is a selective process that combines empirical data, rational thinking, judgment, and intuition. Each of these modes of understanding and analyzing phenomena are valid and valuable and can be made conscious parts of the research process.

Research is also a temperamental process that reflects an individual's style, personality, and predispositions. Research decisions are not made solely on the basis of intellectual or academic arguments. Certainly the path of questioning and focus of inquiry is guided by the need to know and the skills one possesses. But we are also directed by what we like to do and our decisions are often shaped by the ways we feel most comfortable functioning. Consciousness of the motivating forces that shape the questions we choose to ask and the research strategies we use can help us become more aware of our role and increase the objectivity or our work.

Our view of "objectivity", therefore, is somewhat different from the one proposed by most research in the social sciences. We do not believe that one is able to gain an objective picture of classroom processes by using a single instrument of high validity and reliability. Certainly, we would want to be sure that any research tool was gathering accurate and authentic data. But our main concern here is that the single vision gained by using one methodological approach cannot encompass all the important aspects of the phenomena we wish to analyze. Traditionally, objectivity has been synonymous with the researcher's perceptions and descriptions of the behaviors of subjects. We consider that this approach presents a narrow, and often distorted picture of classrooms. At best, it provides us with the perspective of a non-participant, dispassionate outsider but the price we pay is that only visible actions are recorded and the rationale and meaning of these actions to those who initiate or respond to them are ignored. The perspective of the uninvolved outsider is important, but it is not the only valid view. The views of participants--teachers, children, parents--are equally valuable, and truth is more likely to emerge when all of these perspectives are balanced and synthesized.

We are also skeptical of research that presents journalistic, lyrical accounts of classroom life without serious attention to systematic and sustained inquiry. These descriptions attempt to capture "realism" and the passion and subjectivity of the narrator often obscure our understanding of the actual events, behaviors, and activities of teachers and children. Many of these pieces of experiential research are inspired by the political and ideological concerns of the author/observer, expressing themes of oppression and degradation experienced by children who are at the mercy of malicious teachers or unjust school systems.[25] Although one is often inspired by the momentum of these messages and the juicy details of the narrative and moved by descriptions that bring teachers and children to life in a way that can never be gained through quantitative tabulations of behavior, these accounts express very biased and singular visions.

In the research to be described in this book we reject both the conventional, behavioristic approach to the study of classrooms and the loose journalistic model. Our purpose is to gain both objectivity and comprehensiveness by increasing the number of perspectives on the classroom, by capturing the perceptions of observers, teachers, children, and parents, and by integrating qualitative and quantitative data. Our interest is in expanding the number of windows through which one can view classrooms and finding ways of integrating these visions into a more comprehensive and complex description. Another way of describing our approach would be to say that we were interested in a multi-layered description of interactional patterns in the classroom. How do observers perceive and document the patterns of classroom communication? How do teachers reflect upon classroom events, rationalize, comprehend, and critique their own behaviors? And how do children respond to the teacher's demands and interventions, initiate their own activity and define and shape their own learning environments? Each one of the above perspectives can be recorded through quantitative or qualitative procedures. We consider both methods of documentation indispensable to research and believe that their thorough integration can provide a richer and more authentic account of the daily experiences of teachers and children.

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[25] Examples of this mode of experiential inquiry include Jonathan Kozol's Death At An Early Age, Nat Hentoff's Our Children Are Dying, Jerry Farber's Student As Nigger, and Kohl's 36 Children.

Chapter II

Social Science and the Process of Differentiation

Beyond the exploration and development of a comprehensive view of teacher-child interactional patterns, a secondary purpose of our research was to describe the teacher's differential responses to individual children in the social context of classroom life. Using the conceptual and methodological approaches described in the previous chapter, we were interested in recording the subtle and complex patterns of positive and negative discrimination by teachers. Conceptualizing the processes of differentiation and discrimination has been a major concern of social science theory and these theoretical formulations have influenced researchers' views of the meaning and rationale for teachers' behaviors in classrooms. A clearer understanding of the major theoretical models of social science may enlighten our view of classroom structures and processes and make us, as researchers, more conscious and critical of the perspectives we bring to our work.

One of the major preoccupations of social science has been with describing the balance between individual expression and social organization. Theorists and researchers have sought to conceptualize the optimal state of equilibrium between the determining power and constraints of the social and cultural context and the needs and desires of individuals for automony and expression. Psychoanalysts, for example, following the rather pessimistic tradition of Freud, have emphasized the oppressive and inhibiting forces of society that rob the individual of his instinctive wishes to act spontaneously, creatively, emotionally, and sexually. Structural-functional sociologists, in the spirit of Parsons, have stressed the importance of a stable social system (almost static in its weightiness) that dynamically responds to individual initiative and social change, but has its own momentum and force that must be maintained in order to avoid social disorganization. Spontaneous, individual expression is permitted within certain boundaries but is feared when it threatens the equilibrium of a smoothly functioning social system.

Although various theorists may have given greater or lesser weight to the needs of the individual and of the society, these needs are most often seen in opposition to one another. Focusing on the contrasts and conflicts between the opposing forces of the individual and society seems to be related to another major preoccupation of the literature which stresses patterns of deviance, pathology, and disintegration. It has been generally recognized that it is easier to define and document disease than health, to record patterns of deviance than to describe patterns of normality. This pessimistic theme certainly shapes the nature and substance of inquiry in the social sciences. For the most part, theorists and researchers have defined and described social deviance rather than difference and variety and focused on documenting the behaviors, values, and attitudes of those who do not accommodate to the norms of society and its various institutions. School structures are perceived as normal (and therefore correct) and individuals (whether teachers or children) as the negative forces who are likely to threaten the equilibrium.

In this section, we will describe the major theories of social science which have shaped researchers' conceptions of normality and deviance in classrooms. In search of a more balanced perspective, we will begin by describing major theories of negative differentiation or prejudicial discrimination and then follow by describing those theories which relate to the expression of individuality and positive forms of discrimination.

Prejudicial Discrimination

For the most part, social science theory has been concerned with the description and analysis of the negative forms of prejudicial discrimination and the social consequences of deviance. Social systems theory shows how social disorganization leads to deviance. Social learning theories focus on the process of deviation and how society ascribes deviant roles to persons who are perceived as different. Personality theories point to the complex psycho-social roots of prejudice in frustration, fear, and defensiveness. Each of these orientations reveals some aspects of the origins and dynamics of discrimination. Some of the primary questions that these theories seek to answer are: Why is differentiation necessary and how does it come about? Why and how does discrimination occur? How is discrimination manifested in classroom environments?

Social Systems Theory: The Power of Social Norms

Fundamental to classical sociological theory is the concept of a normative order. The founders of this tradition -- Durkheim, Merton, Parsons, in particular -- see society differentiating itself for survival. Differentiation in the form of "specialization" allows individuals to fulfill themselves while serving the collective good. A precarious balance exists between individual autonomy and expression and the need for social cohesion and productivity. This tension between "aggregate" (collective) and "distributive" (individualistic) values must be resolved in the direction of maintaining a stable social order if society is to function without major upheaval.

Without social norms to regulate a cohesive social system, society would regress and disintegrate into chaos. Social discipline sustained by regulatory norms, therefore, is considered necessary, beneficient, and good for individual survival, safety, and development. Although the major protagonists of this view see the regulatory mechanisms as benign, many critics see a preoccupation with order, equilibrium, and control that reflects a middle class bias favoring the status quo.

If social norms are suspended, obscure, or unattainable, individuals deviate. Norms are strained and break down during major crisis periods or rapid social transition, and the social disorganization that results brings about "normlessness", a condition referred to as "anomie". Deviation occurs as individuals attempt to adapt to this anomie. Social systems theory, therefore, views deviance as a response to social conditions that are not deliberately imposed by individuals, but reflect a dysfunction of the system induced by the inadequacy or inappropriateness of its norms. In order to diminish deviance, norms need to be refurbished.

The focus of this orientation is vividly expressed by Robert Nisbet:

> Modern sociology...maintains simply that social behavior, whether moral or immoral, legal or illegal, can be understood only in light of the values that give it meaning and the institutions that provide the channels of these values.[1]

Emile Durkheim, noted French sociologist, fathered this traditional theoretical framework. Differences are described as responses to a prevailing set of values, beliefs and ideals and this "morality" is categorically above state and people.[2] In Social Division of Labor, Durkheim outlined the conditions of his "ideal" society. In the presence of generalized, consensual norms, a society of "organic solidarity" is possible where a wide range of differences can be tolerated as these norms integrate self-interests into a cohesive whole. In contrast, an undifferentiated society is one in which repressive conformity is imposed by rigid, unbending social norms. At the extremes of rigidity, societies function under a "forced division of labor" that leads to totalitarianism.

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[1] Merton and Nisbet, Contemporary Social Problems, 2nd edition, New York: Harcourt, Brace and World, 1966, p. 4.

[2] Emile Durkheim, The Division of Labor In Society, (1893), 1933, p. 65.

In social systems theory, individual needs are never clearly defined but they evidently approach the biological cravings and instinctual drives that are at the basis of Freudian theory. In the absence of regulation, "needs" are perceived as "a source of torment".[3] Social control, therefore, is necessary to restrain this festering passion as well as integrate behavior. Although Durkheim claims that the individual becomes "autonomous" in the society of "organic solidarity", the person is always perceived as subservient to the social will.

In his classic article "Social Structure and Anomie" (1939) Robert Merton modifies and expands Durkheim's theory by giving some initiative to the individual. In Merton's view, it is the individual's adaptation to anomie that makes for different kinds of deviance. A person is responsive to, rather than locked into, social conditions and his "needs" are prodded by social circumstances, rather than consuming desires that must be contained:

> Whatever the role of biological impulses, there still remains the further questions of why it is that the frequency of deviant behavior varies within social structures and how it happens that the deviants have different shapes and patterns in different social structures.[4]

Therefore, social norms, though still paramount, serve not so much to regulate and restrain the individual as to prescribe appropriate and worthwhile objectives ("cultural goals").

Talcott Parsons (1951) gave these fixed norms a more flexible and adaptive character in his theory of social action. Parsons claims that the individual takes an active role in the social system and contributes to the formation and alteration of social norms rather than merely submitting to a normative straightjacket

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[3] Emile Durkheim, Suicide: A Study in Sociology, New York: The Free Press of Glencoe (1897), 1931, pp. 247-248.

[4] Robert Merton, Social Theory and Social Structure, New York: The Free Press, 1957, p. 131.

(Durkheim) or adapting to cultural goals (Merton). As an "actor", the individual is also charged with transmitting social norms through the process of socialization. Although Parsons introduces themes of individual motivation and action, the individual is still seen mostly as responding rather than initiating action and creating social change. Social disorganization is still viewed as malignant and threatening; and deviance is still considered a mere dysfunction of social norms when it may be a warranted challenge to oppressive social conditions.[5]

Those who apply this theoretical framework to the purposes and functions of schools in our society, see the classroom as a microcosm of the wider society -- a reflection of the norms and values of the corporate world beyond school. In On What is Learned in School, Dreeben (1968) suggests that schooling experiences impart to children the norms necessary to sustain "organic solidarity" in society. He summarized the socialization process in schools and gives it prominence in perpetuating the existing social order:

> The argument of this volume rests on the assumptions that schools through their structural arrangements and the behavior patterns of teachers, provide pupils with certain experiences largely unavailable in other social settings, and that these experiences, by virtue of their peculiar characteristics, represent conditions conducive to the acquisition of norms.[6]

Individuals will supposedly achieve a "meaningful" position in the differentiated society that these "democratic" norms ensure. But Dreeben does not give us a picture of how these societal norms are interpreted and integrated by the child. He offers no theories of identification or internalization; no way to understand the dynamic process of the development and acculturation of children. Rather he presents a vision of an all-powerful, determining social system that imposes values and norms on the passive, totally malleable child. Socialization of children is perceived of as complete and irreversible.

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[5] William Bonger, Criminality and Economic Conditions, Bloomington, Indiana: Indiana University Press, 1969.

[6] Robert Dreeben, On What is Learned in School, Reading, Mass.: Addison-Wesley Co., 1968, p. 84.

In Dreeben's characterization the individual nature of the teacher is also given minimal attention. Teachers, as well as children, are regarded as passive agents of a static and controlling system rather than persons with motivation and reason. They serve as an auxiliary or agent in the transmission of established norms. A teacher not fulfilling her part in the process might inhibit vital socialization of society's young, and without sufficient acculturation of norms, children are likely to deviate.

There are grave implications for those children who do not adopt the prescribed norms. William Ryan reveals the value orientation implicit in social systems theory:

> Within such a framework, then, deviation from norms and standards comes to be defined as failed or incomplete socialization -- failure to learn the rules or the inability to learn how to keep them. Those with social problems are then viewed as unable or unwilling to adjust to society's standards, which are narrowly conceived by what Mills calls "independent middle class persons verbally living out Protestant ideas in small town America." [7]

As we can see much of the classroom research reviewed earlier in this chapter originates from the perspective of social system theory which considers the social order of the school and classroom of prime importance and never describes individuals (whether teachers or children) as self-assertive, conscious beings with needs and strengths of their own.

Social Learning Theory: The Imposition of Social Roles

Social learning theory explores the role of socialization in the formation of deviance. It examines the process by which individuals prescribe roles for one another in an effort to clarify their identity and establish boundaries. Lemert, Becker, and Goffman, in particular, have exposed the tendency in this process to categorize others on the basis of superficial observations, and thereby impose deviance.

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[7] William Ryan, Blaming the Victim, New York: Vintage Books, 1968, p. 84.

Conformity to a collective image helps individuals know what to expect from one another and labeling some as deviants helps maintain the community boundaries. Deviants become scapegoats who mark out what is not acceptable behavior.

> Deviant forms of behavior, by marking the outer edges of group life, give the inner structure its special character and thus supply the framework within which the people or the group develop an orderly sense of their own cultural identity.[8]

Prejudicial discrimination is illustrated particularly well in this analysis. Our misguided judgments, often the outcome of our haste to define our own positions, are transmitted through social interactions. The recipients of these judgments are often transformed and molded into something they may not be or want to be. Their individuality, their need for self-expression and autonomy, may not only be denied but destroyed.

Lemert, responsible for the currency of labeling theory, argues that the collective response to a deviant act is the most important factor in the formation of a deviant personality.[9] Society reacts to the deviant act, making the person into a confirmed deviant. And the rules that a deviant happens to violate initially do not just appear (as Durkheim's norms and Merton's cultural goals do), but "rules are the product of someone's initiative". They are made by presumptive rule makers that Howard Becker (1963) refers to as "moral entrepreneurs".

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[8] Kai Erikson, Wayward Puritans: A Study in the Sociology of Deviance. New York: Wiley and Sons, 1966, p. 13.

[9] E. Lemert, Social Pathology. New York: McGraw-Hill, 1951.

> The central fact of deviance is that it is created by society. I do not mean this in the way it is ordinarily understood: in which the causes of deviance are located in the social situation of the deviant, or the social factors, which prompted his action. I mean, rather, that social groups create deviants by making rules whose infractions constitute deviance, and by applying those rules to particular people and labelling them as outsiders. From this point of view, deviance is not the quality of the act the person commits, but rather a consequence of the application by others of rules and sanctions to an "offender". The deviant is one to whom the label has been successfully applied. Deviant behavior is behavior that people so label.[10]

The "deviant" act of a relatively innocent person is reinforced with social control measures that mold a "different" person into a "deviant" role with a corresponding self-concept. The one who has transgressed a rule becomes a habitual "outsider" and the manner in which people relate to him reinforces and finally crystallizes that role.

In this view, deviance is essentially created through social interaction. One or two acts or superficial attributes are assumed by the labeler to represent the deviant's true character. Goffman describes how evidence is misused in an effort to differentiate deviants from the dominant, insiders group.

> While the stranger is present before us, evidence can arise of his possessing an attribute that makes him different from others in the category of persons available for him to be, and of a less desirable kind -- in the extreme, a person who is quite thoroughly bad, or dangerous, or weak. He is thus reduced in our minds from a whole person and an unusual person to a tainted, discounted one. Such an attribute is a stigma, especially when its discrediting effect is very extensive; sometimes it is also called a failing, a shortcoming, a handicap.[11]

Although social learning theory moves beyond the rigid moralizing of social systems theory, we are still left with the ambivalence of cultural relativism.

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[10] Howard Becker, Outsiders. New York: Free Press, 1963, p. 9.

[11] Irving Goffman, Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs, N.J.: Prentice-Hall, 1963, p. 3.

There is no overriding notion of "good" to guide individual differentiation and the evaluation and labeling of deviants appears arbitrary, confusing, and pejorative. Most important, social learning theory overlooks the personal motivations, consciousness, and will of the deviant who appears as an innocent and passive victim of the discriminatory labeling process. The rule-makers (i.e. teachers, welfare workers, judges, psychiatrists, prison guards), categorizing individuals for their own convenience, seem entirely responsible and irreversibly influential.

The literature on teacher expectation reviewed in the previous chapter reflected the conceptual orientation of social learning theory, exposing how teachers impose unsubstantiated labels on their powerless pupils. The teacher is described as selecting those children sure to succeed in the dominant, middle class society (Becker, 1968; Rist, 1973; Leacock, 1969; Rosenthal and Jacobson, 1968). An "ideal type", clothed in middle class behavior and values, serves as the model for success in most teachers' eyes; and the degree to which the student conforms to this "ideal" in appearance, background, and interactional style is the degree to which he is expected and allowed to advance academically and socially in the classroom.

Personality Theory: Prejudice as a Projection of Internal Conflict

Personality theorists consider prejudicial discrimination to be a manifestation of one's psychological disposition. Prejudiced individuals displace social anxiety, project frustration, and resolve ambiguity through their prejudicial attitudes and discriminatory actions. Prejudice is often characterized by its irrational and vicious nature. It is deeply rooted, unconscious, and complex; a condition which makes it difficult to understand. Prejudiced individuals, themselves, often are not completely aware of the origins of their discriminatory attitudes and behaviors.

Victimized people (from minority and powerless groups) become the scape-goats for these internal tensions. They are simply considered innately inferior in the eyes of the prejudiced person --supposedly they were born that way. Frequently, there is no social contact at all between the prejudiced individual and his scape-goat, rather there is deliberate isolation. Prejudiced attitudes, therefore, are expressed and reinforced most often in social avoidance rather than through social interaction, as is the case in social learning theory. The distance is enforced through institutional discrimination that denies minorities access to educational, employment, and housing opportunities for integration. In essence, minorities are blamed, punished, and suffer for the anxieties and fears of the prejudiced person.

The most important single study into the nature of prejudice has been the examination of "the authoritarian personality". Frenkel-Brunswick and Sanford presented this personality type in an effort to diagnose the antisemitism of Nazi Germany. Their "F" scale, measuring the degree of authoritarianism, found that prejudice tends to accompany ethnocentrism, political conservatism, chauvinism, and pseudopatriotism. Prejudiced people show a great deal of "social anxiety". They are uneasy and fearful about other people and try to diminish their "social anxiety" through discrimination which reduces those they fear to an inferior status.[12] The "authoritarian personality" also tends to worship his parents at the same time as he has strong repressed hostility toward them. The interpsychic tensions manifested in prejudice often reflect an unresolved history of parent-child conflict.[13]

Social, legal, political, and economic factors often stimulate the internal dissonance that leads to prejudice. In his classic, The Nature of Prejudice, Gordon Allport (1953) cites various historical, religious, and cultural, circumstances that cause festering ambiguity and feelings of threat and frustration. Interestingly,he blames the state of democracy for some of the strain.

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[12] Frenkel-Brunswick and Sanford, in T.W. Adorno et al., The Authoritarian Personality, New York: Harper & Bros., 1950.

[13] Adorno, et al., The Authoritarian Personality, New York: Harper & Bros., 1950.

> Democracy, we now realize, places a heavy burden upon the personality, sometimes too great to bear. The maturely democratic person must possess subtle virtues and capacities: an ability to form properly differentiated categories in respect to ethnic groups and their traits, a willingness to award freedom to others, and a capacity to employ it constructively for oneself. All these qualities are difficult to achieve and maintain...it is easier to succumb to oversimplification and dogmatism..to repudiate the ambiguities inherent in democratic society, to demand definiteness, to "escape from freedom."[14]

Social psychologists, in their extension and elaboration of the psychodynamic view, document and analyze the supporting social interactions. Most prejudiced individuals are sustained by an elaborate social network comprised of people who share similar lifestyles, and these personal relationships are sustained by institutional structures that reinforce the interpersonal and intrapersonal patterns.[15]

Personality theories do a great deal to uncover the individual motivational dimensions of discriminatory behavior. Other theories focus on the condition of the relatively powerless deviant or victim rather than on the more powerful aggressor. Personality theory also helps to explain the varying intensities and forms of prejudice in different individuals. It honors the complexity of the human psyche and searches for the origins of prejudice in frustration and fear. The psycho-dynamic orientation of personality theory, however, does not adequately explain the interactional behaviors and dynamics of the discriminatory process. It does not explain how prejudicial attitudes are conveyed and transmitted. Social learning theory may be better equipped to interpret this interactional process.

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[14] Gordon Allport, The Nature of Prejudice. Boston: Beacon Press, 1953, p. 515.

[15] Howard Erlich, The Social Psychology of Prejudice. New York: Wiley and Sons, 1973.

The psychological strains of frustration, uncertainty, and overwork influence the way teachers relate to children in the classroom (Waller, 1932; Becker, 1952; McPhearson, 1975). Teachers, pressed by the overwhelming circumstances of their job, can unintentionally misjudge and mistreat students. Personality theory gives a more generous perspective, lifting some of the blame that victimizes teachers in social learning theory. As she often unconsciously oppresses children, the teacher emerges a victim herself rather than a perfunctory perpetrator of the self-fulfilling prophecy. In What's Happened to Teacher?, Brenton (1970) interviewed hundreds of teachers and revealed some of the psychodynamic origins of teacher prejudice and discrimination. "Teachers have yearnings and frustrations that go back to childhood days" and the harsh realities of school life merely reinforce these.[16]

In sum, personality theory offers an analysis of the intrapsychic and psychodynamic origins of negative discrimination on the part of teachers. Social systems theory refers to the power of the social context in determining the normative behavior of teachers and children and considers deviant patterns a reflection of social disorganization and normlessness. And social learning theories document the interactional processes in classrooms that lead to the discriminatory labeling of children who do not match the teacher's "ideal" image.

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[16] Myron Brenton, What's Happened to Teacher? New York: Avon Books, 1971.

Individuation

Differentiation can be positive, as well as negative. Rather than leading to distinctions that serve social demands at the expense of individual strengths, differentiation often occurs in response to individual needs and furthers the development of each person. In this more tolerant view, differences can be seen not as deficiency, but as distinctiveness. Appraisals and evaluations are generally flexible, more objective, less egocentric, and less imposing than the prejudicial judgments that lead to negative discrimination. This second type of differentiation we refer to as "individuation".

There are three theoretical perspectives that hold the individual central in their approach. Differential psychology offers objective measures to help determine and acknowledge individual difference. The humanistic approach suspends judgment of the individual by encouraging each person to explore his own personal experience and develop his own individual style. Developmental theory honors the individual's curiosity and search for meaning in his environment. Progressive development can be encouraged and supported by introducing activities and experiences which are consonant with this curiosity.

Differential Psychology: The Measure of Human Variation

"Wide individual variation has been found in every phase of behavior investigation."[17] Differential psychology has probably best portrayed the variety and complexity of the human species by not only claiming individuality for man, but also by illustrating its type, degree, and form through quantitative measurement.

As the theory of natural selection suggests, all living organisms are differentiated by nature and differences are essential for the survival of the species. The greater the variation among humans, for instance, the more likelihood there is of a successful adaptation to the changing and diverse circumstances that surround us. The "fittest" will dominate, passing along their appropriate adaptations to future generations.

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[17] Anne Anastasi, Differential Psychology, (3rd edition), New York: Macmillan, 1958, p. 49.

In The Origin of the Species, Darwin (1859) shattered the view of a static, God-created world by presenting an ever-evolving and transforming view of nature. Individual differences were thought to be inherited from previous generations and moved towards positive differentiation in accordance with laws of natural selection. Detrimental traits were trimmed away in the adaptation to environment.

> This preservation of favorable individual differences and variations, and the destruction of those which are injurious, I have called Natural Selection, or the Survival of the Fittest. Variations neither useful nor injurious would not be affected by natural selection, and would be left either a fluctuating element, as perhaps we see in certain polymorphic species, or would ultimately become fixed, owing to the nature of the organism and the nature of the conditions.[18]

This "life-adjustment" process has been elucidated by numerous scientists studying the behavior of living organisms. E.L. Thorndike, the father of modern educational psychology, formulated scale units to measure the difference which nature cultivates in each person. With Thorndike's studies, individual differences were no longer a matter of speculation but became quantifiable charactersitics and traits - an undeniable aspect of the human condition.

> Sharp, qualitative distinctions among people are encountered everyday. Closer observation reveals, however, that all individuals are distributed along a continuous scale in every characteristic. In other words, people do not fall into clearly differentiated types. Differences among people are said to be quantitative rather than qualitative.[19]

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18. Charles Darwin, The Origin of the Species, New York: The Mentor edition of New American Library of World Literature (1859), p. 88.
19. Anastasi, Differential Psychology, p. 23.

What was to follow was an array of I.Q. tests, standardized achievement exams, attitude inventories and aptitude measures that helped to describe, diagnose, and predict differences in individual nature and performance. With quantitative testing, individuals could be classified in relation to statistical norms. The mean of the distribution suggested the most prevalent tendency of the population; that is the ideal dictated by nature.

. The apparent efficiency of this quantitative approach is appealing because it introduces objective criteria for measuring individual performance on specific tasks and in accomplishing concrete goals. This approach may be beneficial in that the needs of the individual can be assessed by comparing him to the functional standards of the group and appropriate remedies undertaken. But, the attempt to fit the individual to society (rather than the other way around) can end up perpetuating the status quo rather than assuring social progress or encouraging personal development. Moreover, the survival-of-the-fittest notion presupposes a somewhat ruthless competition of winners and losers, and those varying excessively from the norm may be considered deficient and dispensable rather than different and precious. Finally, the variations that differential psychology defines include only those that can be readily observed and measured. Many of the enlivening inclinations of human variation escape these scientific tests. Creativity, empathy, spontaneity are all capacities that slip by the instruments and often out of consideration.

In the view of differential psychology, education is a training process for human faculties bestowed by Nature. The teacher acts as a diagnostician, assessing the strengths and weaknesses through various testing strategies and offering appropriate remedies for the child's deficiencies. Most of the responsibility and direction for the learning process rests with the teacher as the child remains a passive recipient of the instructor's systematic direction. Robert Glaser, one of the masterminds of this type of instruction, characterizes it this way:

> An effective technology of instruction relies heavily upon the effective measurement of subject matter competence at the beginning, during, and at the end of the educational process. Well-defined sequences or progressive, behaviorally defined objectives in various subject areas must be established as guidelines for setting up student's program of study. The student's achievement is defined by his position along this progression of advancement.[20]

This mode of "individuation" might be represented in the teacher who characterizes her students by describing their functional ability and developing pedagogical strategies based on the assessed needs of the individual child. Such a teacher, too, is likely to be very conscious of the societal demands that her students must be prepared to face in the future and will see her role as a preparatory, acculturating, function.

The Humanistic Approach: The Process of Self-Actualization

The Humanistic Approach holds the individual's perception, awareness, and understanding of himself as the only valid measure of personal worth. Contemporary humanism gained impetus from existential philosophers like Kierkagaard, Sartre and Buber and was translated into interpersonal dynamics by psychologists like Rogers and Maslow. From their writings grew a concern with a reflective, inward search for oneself. Rather than observable behaviors and skills, one's feelings and emotions became the vital indicators of personal growth.

Each individual in and of himself is thought to be unique. He is different from all others. In this approach, the individual is optimistically depicted as naturally inclined toward fulfilling a need for personal meaning and is impelled by a "growth" principle that moves him towards self-expression. This drive, however, is not for mere survival, as the Darwinists would suggest, but for the fulfillment of the individual's nature. To be fulfilled, man's higher needs -- his cravings for love, "belongingness" and dignity -- must be met. Each must discover his whole self through a process of "self-actualization" rather than merely function efficiently in the process of adjustment.

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[20] Robert **Glaser** cited in Charles Silberman's, Crisis in the Classroom, New York: Random House, 1970, p. 199.

Self-actualization (or positive differentiation) is possible only as persons suspend their expectations, directions, and evaluations of one another so as not to impinge on self-discovery. We can offer little guidance, only support, for there is no way of ever really grasping the meaning of another's experience. We have our own to search out. The humanistic approach, therefore, calls for freedom and autonomy that allow for the individual to make his own choices. Rather than supply external stimulation, direction, or input, one should accept and confirm the output of others.

From the perspective of interpersonal psychology, Rogers describes what could be called a process of individuation:

> There is implied here a freedom to explore oneself at both conscious and unconscious levels, as rapidly as one can dare to embark on this dangerous quest. There is also complete freedom from any type of moral and diagnostic evaluation, since all such evaluations are, I believe, always threatening. Thus the relationship which I have found helpful is characterized by a sort of transparency on my part, in which my real feelings are evident; by an acceptance of this other person as a separate person with value in his own right; and by a deep empathic understanding which enables me to see his world through his eyes.[21]

The Humanistic Approach offers a shift in the emphasis of education because it considers knowledge to be a human fabrication that is subjective and incomplete. Discipline and structured curricula are unjustified and the educational process becomes an exploration of personal feelings, individual consciousness, and our mutual humanity. The humanistic educator becomes a "facilitator", in Carl Rogers' terms, and sets in motion the relationships that promote trust, cooperation, and acceptance. Such a teacher should be non-judgmental and non-directive, allowing each child to make his own decisions, evaluations, and discoveries. The all-important element in this mode of education is not teaching, but the creation of a "learning environment" where children are free to explore, discover, and express themselves (Leonard, 1968; Dennison, 1969).

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[21] Carl Rogers, On Becoming A Person, Boston: Houghton and Mifflin, 1961, p. 34.

> A classroom climate of permissiveness and understanding provides a situation free of threat, in which the student can work without defensiveness. The decks are kept clear for him to consider the material being discussed from his own internal frame of reference. His desire for acceptance is realized, and because of this he feels the demand upon himself to be responsible for his own interpretations and insights. He feels the full strength of another person's belief in his own integrity. An interesting and important outgrowth of this self-acceptance is the observable improvement in his inter-personal relations with others. He will tend to show greater understanding of them and develop freer, more real relationships with them. This has great importance from the standpoint of the communication and extension of the basic classroom mood.[22]

The Humanistic Approach is vulnerable to criticism on a number of counts. Humanism often appears diffuse and even contradictory - more like an attitude that pervades a number of different fields of thought rather than a systematic theory. The view that the individual is the seat of authority and direction makes for what is often considered an "anything goes" attitude. Preoccupation with personal freedom can lead to a neglect of social responsibility, as

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22. Arthur Sheldon cited in Carl Rogers, Client-Centered Therapy, Boston, Mass: Houghton Mifflin, 1951, p. 393.

individuality lapses into egocentricism. Some concession to social consensus seems necessary to avoid chaos; yet humanism, in its staunch rejection of tradition and social precedent, proposes no guidelines.

The lack of structure and objectivity makes it difficult for many teachers to fully accept this perspective. In their estimation, humanism appears naive to the demands of social reality. Children frequently need to be disciplined rather than indulged, and structures and norms often help restrain childhood egocentrism.

Developmental Theory: Education As An Orderly Process of Growth

The educational philosophy of John Dewey and the child psychology of Jean Piaget have had a profound impact on social science theory and educational practice. Developmental theory, like the other perspectives, values individuality and freedom. It sees man confronted by his environment but not at its mercy, as those who honor the laws of natural selection do. The individual acts on his surroundings, modifying them continually. Education, therefore, has the capacity to reform society, as the individual --empowered and activated-- not only survives but transforms.

Developmental theorists believe, like the humanists, that man is inclined towards growth --for Dewey education is growth. But growth is a disciplined process that has direction, but not a culminating aim of normality nor an illusive ideal of self-discovery.

> We have been occupied with the conditions and implications of growth...When it is said that education is development, everything depends upon how development is conceived. Our net conclusion is that life is development, and that development, growing, is life. Translated into its educational equivalents, this means that (i) the educational process has no end beyond itself; it is its own end; and that (ii) the educational process in one of continual reorganizing, reconstructing, transforming.[23]

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[23] John Dewey, Education and Democracy, New York: The Free Press, (1916), 1966, pp. 49-50.

Curiosity leads one into activity that he can appreciate and absorb. The greatest need of the individual is to have his curiosity nurtured at developmentally appropriate intervals, rather than to acquire skills or have his feelings catered to. Individuation occurs as a teacher actively diagnoses, stimulates, and sustains the child's interest. This requires an active and disciplined guidance on the part of the teacher, but not the imposing of an "objective" structure.

Piaget bore out many of Dewey's theories in his years of observing children. He offered an alternative to the stimulus-response model of learning and reinforced the notion that the child is the principle agent in his own education. Piaget's theories expose the structure of children's thought. The child continually recasts the mental structures that order the images he beholds. He progressively accomodates and assimilates new experiences into his expanding framework or world view. Piaget grouped these evolving structural changes into developmental stages.

It is critical that individuals have the structures to accomodate new knowledge, rather than merely the skills to perform new tasks. "Teaching means creating situations where structures can be discovered: it does not mean transmitting structures which may be assimilated at nothing other than a verbal level." [24] The teacher is challenging the student and responding to the mental structure that is the child's stage of reasoning.

In the "open classroom", children learn while dealing with "real-life" problems. The teacher leads the child to activities that follow his interest and demand his involvement. The student, therefore, collaborates with the teacher in selecting the what and how of his education. The child's curiosity demands careful nurturing, however. The British Infant Schools, referred to by Silberman (1970) and Featherstone (1972) illustrate how the classroom becomes a laboratory for learning without turning into a playground of frivolity. The classroom must be monitored and the teacher's role is one of mediation. She becomes a mediator between the child and the demands of society, between the child's curiosity and the classroom material, between the child and other children in the classroom, and between conflicting and competing interests within the child himself. Silberman describes the demands of this type of teaching and suggests that the teacher individuates by sustaining "development."

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[24] Jean Piaget, The Moral Judgment of the Child, New York: Harcourt Brace and World, 1932.

> ..Informal teaching makes a number of demands on teachers that the conventional classroom does not. For example, it requires much more alertness. To be able to "maximize the occasion", a teacher must always be "at the ready" -- aware not only of what each child is doing at any moment, but of what state of development the child is in. Since anything and everything a child may do can provide the occasion to be maximized, teachers are always teaching; the intellectual and emotional demands seem relentless and unending. And teachers need to be informed about many more things, the curriculum is not limited to the teacher's lesson plan, but is as broad and unpredictable as the children's interests.[25]

In sum, the theories of individuation presented above offer different views of human nature and imply different clinical prescriptions for treating, relating to, or teaching the growing child. Differential psychology sees human variation as an outgrowth of Nature with each individual needing to "adjust" to the demands of society in order to assure his own survival. We can "assess" the needs of an individual by comparing him to the functional standards and statistical norms of a group, and in this way, help him compensate for his deficiencies and ensure the use of his strengths. Humanism rejects the imperatives of natural science and focuses on the individual's felt needs. Each person must explore, discover, and express his own individuality through the dynamic process of "self-actualization".

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25. Charles Silberman, Crisis in the Classroom, p. 267.

And finally, in developmental theory, individuality emerges in one's encounters with the environment. As the child explores the dimensions of objects and persons around him, he progressively recognizes their distinctiveness and his relationship to them and develops his own competence and individuality.

From our review of the major theories of differentiation found in the social sciences, we recognize the interrelationship between theoretical formulations, methodological strategies, and clinical practice. Sometimes researchers are conscious of the theoretical views that shape their inquiry and analysis, but more often they proceed with their work not recognizing the powerful impact of their conceptual biases. Part of the objectifying process of classroom research lies in understanding the interaction between basic social science theories and the development of research methods. The more conscious we are of the origins of our conceptual formulations, the more deliberate and critical will be our view of the research process.*

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*We would like to express out thanks and appreciation to Edward Gondolf who was responsible for much of the literature search and writing connected with this chapter. His contributions were insightful and scholarly.

Chapter III

The Long Search for a Research Sample

Background and Evolution

It is important to talk about some of the origins of our collaboration on this research project because our own histories have very much shaped the present inquiry. Carew and Lightfoot have both been interested in describing and analyzing the behaviors of human encounter but from different perspectives. In her previous work as a developmental psychologist, Carew (White, Carew Watts et al., 1973; Carew, Chan, and Halfar, 1976a,b; 1977) has observed and analyzed the experiences of young children (age one to three) in two settings: the home and the day care center. Her purpose is to describe the experiences encountered by young children in their everyday "natural" environments, to assess their impact on the child's intellectual and social development over a formative period of his life (from age one to three), and to trace the role played by the human and physical environment in the child's experiences. A major question Carew has sought to answer is to what extent is the child's development of intellectual competence related to his own active construction of "intellectually valuable" experiences for himself, to what extent is it related to his passive assimilation of such experiences provided to him by the environment (e.g. mothers, teachers, television), and to what extent is it promoted by true reciprocal interchanges in which the child and the interactor jointly shape the child's intellectual experience. One distinctive aspect of Carew's work is her interest in the environment as it is absorbed by the child in his moment-to-moment experiences. Environment, for her, is a dynamic force that is defined as much by the child's own behavior in assimilating and accommodating to it as by its own independent qualities considered apart from the child. This perspective has led her to pay relatively little attention, until now, to aspects of the environment that a sociologist, for example, might describe when analyzing the home or school as a social setting.

In contrast, it is a focus on precisely these independent qualities of the environment that characterizes Lightfoot's previous work (Lightfoot, 1972, 1973, 1975, 1976). As a sociologist, her interest has been in describing how the teacher's world -- her personal, cultural and educational history, her values, attitudes, beliefs and goals, her professional skills and experience -- influence the pedagogical and procedural decisions, the dynamic patterns of interaction, and the social structure that develop in the classroom. A central theme of her work has been the analysis of discriminatory patterns of teacher behavior in the use of authority, power, evaluation, and cognitive stimulation. When the teacher responds to a child's behavior, she necessarily perceives this behavior through the filter of pre-established categories. The same child behavior may be given a different interpretation depending on who the child is and what he represents to the teacher. A black boy racing across the classroom may be seen as aggressive and hyperactive, while a blond, willowy girl doing the same thing may be seen as gliding across the classroom space in a creative and expressive dance. Similarly, a rough, unkempt, working class child who says of the Emperor "He don't have no clothes" may be seen as crude and sexually precocious, while a neat middle class child making the comment "He's nude" may be seen as clever and sophisticated. Lightfoot believes that children receive many messages from teachers that go beyond or conflict with the interactions an observer might witness. A challenge she has faced in previous work has been to develop interview methods for documenting underlying teacher values and feelings that penetrate the unspoken environment (e.g. why does a child say "My teacher is an angry person" when an observer sees no evidence of this in her overt classroom behavior?).

How are our two perspectives related? Why had we thought it fruitful to collaborate in the present research? Some of the reasons are personal (we simply work well together!), others are rooted in our cultural and professional histories. Professionally we both have been interested in the study of human interaction, especially the interaction of unequals -- the child and his mother, the child and his teacher. Carew has approached this question from the point of view of the child, Lightfoot from the point of view of the adult, but for both of us the central issue is what happens to the mind and personality of the child as a result of cumulative, micro-encounters with an environment that has powerful built-in biases, both positive and negative. As black researchers our interest in this question is more than academic. It is of urgent concern for us to understand and explain how children come to be labeled as "different", "inferior", "deviant"; how these perceptions by powerful others shape the child's experiences, and how in turn, experiences influence the child's intellectual, social, and emotional development. We see this process of stigmatizing through labels as a gross distortion of a more general and positive process of differentiation among children that teachers must undertake if they are to respond to the individual needs of children. A teacher's job, after all, is to judge what children need and try to provide it for them (this does not mean she must do the providing; often the child's needs are best served by encouraging him to solve his problems and answer his questions himself). The theoretical, practical, and ethical challenge, then, is to distinguish teachers whose perceptions and actions are deliberately discriminatory and destructive, from those whose perceptions and actions spring from a desire to respond positively to the individual needs of children even though these may sometimes be misguided and unwittingly prejudicial and harmful. Teaching is not merely a behavioral, observable process, it is a reflective, thinking process. Teachers need to be recognized and respected as thoughtful and cognizant people who make deliberate and careful decisions as well as impulsive, and sometimes dangerous choices.

We think it is important to recognize not only the humanity of teachers but also the complex nature of the researcher's role. One of the great limitations of much ethnographic and ecological work done in schools is its downplaying of the researcher's role. Researchers claim an objective, dispassionate relationship, if any, to the subjects of their research, and act as if they functioned like well-placed cameras, mechanically photographing events and behaviors with precision and accuracy. This downplaying of the researcher's role implies lack of impact as a "person", thereby guaranteeing somehow his objectivity as a "researcher". We maintain, however, that it is critical that researchers involved in interactional and ecological research in social settings must be systematically reflective about their presence in the field, and that a process of self-conscious reflection and recording of behavior must begin with their first movements into the field. The search for a research sample thus becomes a significant part of the inquiry, especially when the topic of inquiry is somewhat threatening and controversial and raises basic socio-ethical issues for both researchers and subjects. Sometimes the odyssey itself is enlightening and may influence the content and/or design of the research. We strongly argue, therefore, that researchers must look critically at both sides of the intervention process -- their own movements into the field and the subjects' responses to their presence.

Initial Movements into the Field

In these times of increasing discretion, professional solidarity, and guardedness research has become difficult to initiate. For the most part school doors are no longer open to academic inquiry; teachers want to know the immediate benefits to them and parents are protective of their children's privacy. When the research design not only demands a long-term commitment from participants, but also probes some very sensitive and threatening aspects of human relationships, seeking permission to get into schools can become a complex and arduous task. Our situation was further complicated by the University's legacy of neglect and arrogance towards schools and teachers. For years teachers and administrators in Metropolitan-area schools had felt abused by research that did not seem to recognize their humanity nor offer any practical benefits to the schools in return. Teachers felt over-researched and principals felt responsible for protecting their teachers and children from such encroachments. Our initial inquiries, therefore, were very discouraging.

In the spring of 1975 we began talking with knowledgeable friends and acquaintances, asking them to suggest sympathetic contacts and effective strategies for approaching Metropolitan-area school systems. One of our primary dilemmas, for instance, was whether we should try to make our initial contacts with high administrative officials (from the top down) or with enthusiastic teachers who would become our advocates (from the bottom up). Because of the sensitive nature of our research and our concern for not causing trouble or risk to individual teachers, we decided to follow the prescribed bureaucratic procedures, seeking first the blessings of the superintendent's office, then of principals and teachers. We anticipated several possible responses from the superintendent's office -- advocacy, support, mild acceptance, indifference, outright refusal. As it turned out, our search required a great tolerance for ambivalence and uncertainty. For the most part, answers were vague, waiting periods long, the process circuitous.

A critical aspect of our research design demanded that the target classroom population be at least 20% minority, preferably black. Because most public schools tend to be relatively homogeneous in terms of class and race, the requirement of heterogeneity substantially reduced our choices in the Metropolitan area. We quickly recognized that it would be impossible to work in the Metropolitan schools. In the spring of 1975, Metropolitan schools were still experiencing the turmoil and threats of violence connected with bussing and desegregation, and 1976 was not expected to be a more tranquil year. Because of the conflict within and outside of schools, the central administration had decided to bar researchers for fear of further disruption and embarrassment in an already chaotic situation. Even if the Metropolitan schools had permitted our entry, however, we would have been ambivalent about working there because of the highly unusual atmosphere. It would certainly have been challenging to document the process of transition and accommodation that follows major upheaval and radical population change within schools, but that was not our primary focus. The Metropolis, therefore, was quickly eliminated from our search for classrooms although we continue to be fascinated by the many researchable issues that might emerge in these schools in the next several years.

As we investigated several other school systems in the Greater Metropolitan area, we found that very few of them had the appropriate 20% racial mixture that we needed. Suburban systems showed little promise of providing a heterogeneous sample. Even with the additional blacks supplied by a bussing program from the inner city, suburban schools remained overwhelmingly white and middle class.

Two systems that did look encouraging, however, were Charleside and Richmond. In Richmond our initial contact was with the Associate Superintendent, Dr. L., who welcomed us warmly and seemed eager for us to work in his schools. He appeared less concerned about the substance of our research than about the "growth value" of research to the practice of teaching. He spoke often of Richmond's open and self-critical approach to the development of curriculum, the in-service training of teachers, and the strategies for supporting the intellectual and social growth of children. According to Dr. L., Richmond schools were a model of the productive dialectic between knowledge and practice, theory and action. The only drawback he could foresee in our working in the schools was that, even with the presence of bussed children from the Metropolis, the student population might not be diverse enough for our research design.

After the positive and enthusiastic encouragement from the superintendent's office, we were surprised to meet a great deal of skepticism and resistance from the principals and teachers in the schools Dr. L. had contacted on our behalf. Even with his strong endorsement, principals were protective of the privacy of teachers and teachers were almost militant in their demands for the power to make decisions about research that would intrude into their classrooms and influence the lives of their children. In September 1975, we began visiting the recommended schools and presenting our proposal to the principals. After receiving a few promising responses, we were told that the final decision would have to be made by a recently-formed Research Committee composed of teachers elected from throughout the school system and organized for the purpose of critically reviewing and screening research proposals. Carew and Chao met before this committee and received an affirmative response and permission to proceed with gathering our research sample. Both teachers and principals in Richmond seemed most impressed with the collaborative nature of our research, our view of teachers as uniquely knowledgeable about classroom life, and our commitment to observations throughout the school year.

In late Spring 1975, we were also beginning our negotiations in Charleside, a process that was initially more laborious and frustrating. After numerous attempts to contact various people in the central office of the Charleside School Department, we finally arranged a visit with Mr. V., the Assistant Superintendent for Instruction. Although cordial, his reponse to us was guarded as he asked a series of straightforward questions about the process, substance, and goals of our research. Having endured the wrath of teachers, parents, and children who had been "over-researched" for the past several years, he was particularly interested in the value of our study to the training of teachers and the education of children. Mr. V.'s questions were probing and tough, always taking the point of view of educational practitioners and consumers. Our proposed study, however, sounded "different" to him; our commitment to the practice of education seemed genuine. He agreed to support our research by contacting school principals who might be sympathetic to our efforts and whose student populations were appropriately heterogeneous. We were to follow his phone calls to principals with letters of introduction, short descriptions of our research, and requests for interviews with their teachers the following Fall. Weeks of waiting for responses to phone calls and letters followed. Several of the principals expressed distrust or disinterest, others claimed to be overwhelmed by year-end responsibilities, and a few expressed curiosity and interest and urged us to visit them in the early Fall. Fortunately, after presenting our proposal in Charleside, several teachers agreed to participate in the study and the Inner and Outer Schools were the chosen sites. We preferred to conduct our research in Charleside because it seemed a more diverse, heterogeneous and urban school system; Richmond's image was more precious and exclusive.

Contradictions: Stereotypic Images and Real People

As we began our visits to Charleside and Richmond schools in September 1975, we were joined by Gloria Chao, a student of anthropology and psychology who would serve as classroom observer and field coordinator. Our research team, composed of two black women professors and researchers and an Asian field coordinator, presented an uncommon and often disconcerting image to an audience of typically white male administrators or white female teachers. We soon realized that our physical presence and style were a most important aspect of our negotiations with administrators, principals and teachers. The picture we presented -- of articulate, determined, cultured, and caring professionals -- was probably directly contradictory to the stereotypes of minorities held by even the most liberal of people. Blacks in this society are not supposed to be the thinkers, the conceptualizers, the articulators of ideas. Blacks are not supposed to be subtle and refined and in command of the social context. Thus while responses to us were usually cordial and friendly, one could always sense the surprise, the tension, and the uncertainty of coping with the strange and the contradictory.

Before entering the school setting we had discussed the roles each of us would play in the presentation of our research proposal. First, we thought it was important that we all be present during the initial sessions with administrators and teachers so that they would have a complete picture of who we were. Their reaction to us as people was likely to influence their decision to participate as much as the content of our message. We wanted to convey in person the nature of our commitment to the research, that each of us would be actively involved in the collection of the data, and that we would not introduce any new people to our research team during the course of the year. The intimate and long-term nature of the study demanded that we establish a trusting and comfortable relationship with teachers and that the teachers be able to anticipate our consistent presence and engage in continuous dialogue. It also seemed important that the teachers be able to watch the three of us interact, because our interactions offered another view of our personalities and professionalism. We were well aware that we would be observed and judged as individuals, and also that teachers would be interested in the relationships among us.

Although we thought it vital that we all participate in these initial interviews, we also sought to control the power of our collective presence by selecting a leader and spokesperson. I was chosen for this role because it required a degree of experience in school settings that I had gained in previous work. We felt that these initial interactions with teachers were critical moments in which we had to establish the subtle balance between assertiveness and restraint; between intimacy and distance; between humor and seriousness -- a delicate balance that is partially learned through experience. With her considerable background in the subtleties of field research, Carew assumed the role of critical listener and observer. As I spoke, she carefully watched the unfolding events and the reactions of the audience. When things were left unsaid, she would fill in the missing links. When people seemed confused or overwhelmed, she would simplify and clarify. When the mood became too heavy and serious, she would be light and humorous. Furthermore, Carew's listening role became important later to our analysis and understanding of the events as we looked at them retrospectively.

Gloria Chao played a deliberately peripheral role during the presentations. In part this was because she had had less experience in ethnographic and field research and was diffident about taking a central role; in part it was because we had decided that one of us should be responsible for documenting the content, mood, and interactions of various participants in these meetings, and Chao had had considerable relevant experience. Her role differed from Carew's in that she sought to record and describe rather than evaluate and intervene. She made no judgments of the quality of my statements nor was she interested in changing or improving the course of interaction. She remained relatively distant from the events so that her observations would be objective and descriptive. In addition, since Chao would be the main classroom observer, we thought it wise that she begin assuming a very low-key image in these initial meetings. It seemed important that teachers view her as quiet, non-disruptive, and potentially invisible in the classroom. Her non-interactive role during the presentations would begin to establish this image. (Interestingly enough, the image that Chao sought to convey also matched most people's stereotype of the quiet, inscrutable Asian and may have helped to put our listeners at ease.)

Interview: Strategies and Substance

During my presentations I tried to be sensitive and responsive to the subtle dynamics of the environment and the people within it. Although my core message remained constant, the points of emphasis and elaboration shifted with each setting in order to present our ideas most persuasively to the audience. The major themes emphasized throughout all of our conversations with teachers were as follows.

The State of the Art: Research on Teaching. First, I expressed our dissatisfaction with research about teachers and teaching. For the most part, the research literature portrays teachers as mindless beings who give very little deliberate thought to their actions and who are neither reflective about nor conscious of their decision-making process. Usually researchers come into the classrooms with prescribed instruments that count specific teacher behaviors, and then those behaviors are correlated with student outcomes (i.e. achievement, self-image). Not only are the behavioral categories already determined but the observations are of minimal duration, capturing only a minute segment of daily classroom life.

We told teachers we hoped to create a research process that was substantially different. We strongly believed that teachers are thoughtful, reflective beings who often have good and sound reasons for doing what they do. One must seek to understand the purpose, motivation, and rationale behind a teacher's behavior, not merely count how many times a specific behavior occurs. Teachers, we claimed, are our most valuable and knowing resource. Their perceptions and perspectives are central to understanding classroom life and must be an integral part of our data. We talked about establishing a collaborative relationship with teachers and emphasized the reciprocal, participatory nature of the research task. I often pointed to the retrospective interview which was designed to elicit the teachers' responses to observational data collected over the course of the year, providing the opportunity for them to embellish, elaborate, and disagree with our interpretations. We spoke of the teachers always as co-researchers.

Our presentation also stressed the fact that our research would be long-term rather than short-term. Although we were asking for more of their time (one year of observation) than is typical for classroom research, we would not be basing our findings on data that only represented a small unrepresentative portion of classroom life. We described our research as generous in nature, allowing for change and adaption, purposefully non-evaluative, and not dependent on the peculiar circumstances of a moment in time. So although we would be visiting their classrooms frequently and over a long time, our visits would be less intrusive and disruptive and our data more comprehensive and authentic.

In retrospect the promises of collaboration were clearly the most persuasive aspect of our argument. In our discussions with the Richmond principals, for instance, the reciprocal, collaborative nature of our work was clearly the outstanding selling point. They were weary of high-powered researchers coming in and doing things to their teachers or making evaluative judgments. They thought of their teachers as highly skilled and intelligent people who should be an integral part of the research. Teachers not only responded to the implied intimacy of our message but also to the respect for teachers that we conveyed. We spoke of them as the real knowers and referred to ourselves as being able to listen, observe and understand. So, in a sense, we looked to them as authorities. This was clearly an effective and compelling strategy and it was not dishonest, for we truly believed our words.

In one case, however, we realized to our dismay that our emphasis on collaboration, implying intimacy, closeness and emotional support might have been too seductive and compelling. The occasion was our very first interview with teachers, at the Bristol School in Charleside. We arrived just after school when the teachers were visibly weary and worn from the hard day's work with their first graders. They knew well that their principal had given us a favorable response and probably felt some pressure to participate in the research. Ms. Smith, the more experienced and relaxed teacher, seemed mildy receptive, detached, and somewhat disinterested, but willing to hear us out. Ms. Jones, a second-year teacher, seemed intense and somewhat defensive at first, but became increasingly involved and committed to the research as the presentation unfolded and I touched on the theme of collaboration in a common enterprise. By the end of the interview I recognized that we had not only probably won over both teachers but that Ms. Jones might be expecting too much of the research. Our powerful and compelling portrayal of the research, our philosophy, our goals had sparked a fire in Ms. Jones which we had not anticipated and which was to become the source of great disappointment and conflict when we were not able to use her classroom in our study for reasons described in the next section.

The Issue of Race

Although we often stated our interest in documenting life in classrooms where children were from "many different and interesting backgrounds", we were never explicit about the ratio of blacks to whites that we required to implement our study. While we made our appreciation of variation and difference among children obvious we did not make our criterion of a 20% black population known. In retrospect, I think we feared teachers and principals would be threatened by the explicit mention of race. We also felt that the presence of two black researchers was already threatening enough without our saying that race was a critical aspect of the research design. The decision to remain vague about this criterion for selecting classrooms led to many unanticipated ethical dilemmas. We were being dishonest in not emphasizing the relevance of race to our study, yet we feared that if we did so, teachers would not want to become involved, or, if they did, their behavior would be seriously distorted. We were convinced of the goodness of our goal -- which was to understand and to help others understand how teachers ordinarily treat black and white children -- but we worried whether it was honest or even necessary to conceal this purpose.

Our less than candid responses about the proportion of black children in the classroom got us into trouble in our relations with the teachers at the Bristol School who had apparently been very impressed by our presentation. In our initial conversation with the principal of the Bristol School, Carew had asked about the number of minority children in each of the first grade classrooms. We learned then that Ms. Jones' classroom did not have the appropriate proportion of minority children and therefore could not be used. Instead of being clear about our research criterion and avoiding any contacts with Ms. Jones, we proceeded to present our research study to both first grade teachers and to seek their approval and participation. Both teachers were persuaded by our presentation and volunteered to participate in the study, and the teacher whose classroom we could not seriously consider became most committed to having us intimately involved with her classroom life.

Because we had not originally been candid about the sample criterion, we had to contrive one after the fact. We searched for one that would seem fair, research-oriented and non-evaluative and decided that our professed reason for excluding Ms. Jones would be that we were selecting a relatively comparable group of teachers with several years of experience. Even though this decision was delivered gently to Ms. Jones as a tentative one requiring further discussion, she felt angry, excluded, and harshly judged. She would not have experienced the pain and anger she did had we been explicit from the beginning about our sample selection. Clearly our ad hoc criterion of teaching experience seemed contrived and arbitrary, and Ms. Jones was left feeling abused and cheated by "University researchers" -- an allegation that really stung us.

In all of our presentations we were explicit about the race criterion only once and that was with the black principal at the Jordan School. Before we even arrived Mr. C. had decided he would not permit researchers into his school. He claimed that parents and the community would not tolerate the intrusions of research, and he maintained an unsympathetic distance during most of our visit. After my rather abbreviated presentation (because Mr. C. seemed bored and frustrated with our presence), Carew gave a lengthy explanation of our deep concern for the lives of black children and of our desire to document some of the positive and productive experiences of black children in the public school. Although Mr. C. never yielded, his response to us gradually mellowed and became more approving and supportive as Carew "revealed" our hidden agenda. Again, our initial lack of candor had hurt rather than helped our cause.

The Pragmatic Value of our Research

Our initial interviews with the teachers stressed the pragmatic value of our research and the links between our research and actual training materials for teachers. One of the ways we distinguished ourselves from other researchers was by our concern for the practical impact our work would have on the lives of teachers and children in the classrooms. We would not be content if our research reports were read only by academicians and served only to promote more research. However, we recognized as we made our claims for the "relevancy" or our work that we were slightly overstating our ambitions for this study and presenting an unrealistic picture of the immediate impact of our findings. We strongly believed that we had a real responsibility to translate the knowledge gained from our research into real-life choices and alternatives for teachers, but we also realistically recognized that reporting research findings was not the same as supplying concrete materials, training, or guidance to teachers. We did not talk to teachers about the arduous and complex task of making the translation from research to practice and perhaps left the impression that practical help might be forthcoming from our work sooner than was feasible.

Although our findings would not be of immediate benefit to their teaching, we did emphasize to teachers the potential value of observation, reflection, and analysis. We spoke of our prior experience with teachers who claimed that the research process had given them the chance to pause and reflect on their behavior, to look self-critically at their pedagogical choices, and to ask themselves questions they were rarely forced to confront in the everyday experience of teaching. So although we could not promise services, training, or consultation we did hope that these teachers would welcome the opportunity to look at their work in new ways and to have attentive and appreciative listeners.

Two Stories of Success: The Inner and Outer Schools

We had very different experiences in the two schools that agreed to participate in our study. Descriptions of our meetings with the teachers and principals follow and illustrate the complex variables that combined to produce both affirmative responses.

The Inner School

When we arrived at the Inner School, Mr. Hamilton, the principal, greeted us very warmly and invited us to sit in three chairs that had obviously been arranged, in a row to the right of his desk, in anticipation of our visit. He recognized Carew from a meeting they had both attended for Charleside Follow Through several months before and seemed to become even more relaxed and pleasant upon renewing their acquaintance. After a few minutes the two first grade teachers appeared and sat on the couch facing Mr. Hamilton's desk. The principal introduced everyone. This was the first interview where we met initially with both principal and teachers simultaneously. The general pattern had been for us to talk first with the principal and gain his or her approval to speak with the teachers. But, on this occasion, the principal was with us during the entire interview and indeed seemed to play a prominent role throughout even while I made my presentation to the teachers. His presence seemed to work to our advantage. One had a sense that the teachers saw the principal as in authority, as the decision-maker, yet that they had considerable respect and good feeling for one another. Mr. Hamilton seemed to proudly show off his two teachers as fine examples of public school teachers whom we might do well to include in our research.

As I presented our proposal, I made a conscious decision to speak directly to the teachers. (Because of the seating arrangement, this required my facing away from the principal.) I wanted to indicate that teachers were the primary actors in our research and deserved the most careful and complete attention, for I had sensed that although Mr. Hamilton was prepared to invite us in, the teachers needed convincing. Teachers A. and P. listened dutifully, but showed almost no reaction. When we asked the teachers if they had any questions about our research, they did not respond immediately, but then began to talk about the Inner School community. Ms. Allen spoke proudly of her long association with the school and her good feelings about the heterogeneous population of students: "You can't find nicer kids than the ones in this school." Many of these remarks seemed directed as much at Mr. Hamilton as at us. Ms. Prima made a few positive comments in the same spirit of admiration for the children and the school, but she was generally less open and expressive.

When we gently asked them whether they were interested in becoming involved in the research, they both indicated that they would participate. Their immediate affirmative response came as a welcome surprise but was clearly not the result solely of our attempts to persuade them. They seemed to have already been convinced before we arrived -- very probably by Mr. Hamilton. The teachers had only one major concern. The school was awaiting another first grade teacher and their classes would be overcrowded and chaotic until the new teacher arrived. They did not want our observations to begin until after the situation had stabilized. We indicated that we would not begin observations for another few weeks, and that Chao would be in touch with them soon. When Chao asked how she might best reach them, they offered their home phone numbers. They were the only teachers who seemed comfortable allowing us such a direct means of contact.

We left the Inner School feeling very pleased with the strong support and encouragement we had received from Mr. Hamilton, although we were also a bit baffled by it. It had been an extremely productive and inspiring 45 minutes and for the first time we began to believe there was a real chance of working in the Charleside Public Schools.

The Outer School

Our first visit to the Outer School was rushed and frustrating. Our appointment was scheduled during the teachers' lunch break and by the time we all sat down to talk we had less than twenty minutes to make our presentation. Upon our arrival Mr. Barry, the principal, greeted us casually and tentatively and then went in search of his three first grade teachers. He returned alone and spent the next several minutes describing his school -- the number of children, the neighborhoods they come from, the bussing patterns. Mr. Barry asked no questions about our research and was clearly not interested in becoming engaged in the process of deciding whether we would be welcome. It was obvious that he viewed his role as neutral and peripheral. He would deliver the teachers to use but he would neither support nor undermine our efforts. The decision seemed to belong completely with the teachers.

After our visit with the principal, we went in search of the teachers who seemed to have forgotten our appointment. The first one we found directed us to the teachers' room where the other two were rushing to get their lunch. Their minds were clearly on other things and our presence felt intrusive. Although they remembered the appointment after we appeared, none of them had anticipated our visit, and Mr. Barry had been very vague about our purpose in being there.

We apologized several times for adding to their already burdensome day and followed them into Teacher R.'s room where we sat in children's chairs around a small table. My presentation of our research was rushed, almost breathless, as I hammered out our purposes, goals, and procedures. The teachers ate their school lunches and listened. Children were already waiting at the classroom door to come in after lunch, and Teacher R. would get up intermittently to tell them to stop banging and wait more patiently. The whole atmosphere was pressured as I struggled against time to capture the interest of the three teachers. But there was no time for elaboration or explanation, no time for them to see us as interesting and caring people, no time for us to get a sense of who they were, and no time for them to really respond with questions and comments.

Even under these circumstances, Teacher R. and Teacher E. showed their interest. The third teacher seemed to have turned us off and was mildly annoyed with our requests. Ms. Ryan expressed concern that we would be a source of disruption in her classroom. She claimed that she had very few visitors and that children would seek attention from us and demand that we interact with them. Her last year's class had been very unruly and caused her great anxiety; she did not intend to relive that experience or invite any threats to classroom order. To this Carew spoke briefly about our extensive experience as observers in classrooms and our ability to fade easily into the background. Ms. Edwards wondered whether we would be able to consult with them about children who seemed to be having difficulties learning and adjusting to school. I tried to make very clear that our roles would not be advisory or supportive, that we would not be offering professional consultation, and that we did not even claim to have the expertise to do so. We would be assuming an observational role, a non-evaluative function, but part of the research process would be sharing our observations with them at the end of the study.

This is a very important distinction to make clear. There is always a tendency for over-worked teachers to seek additional support and resources and to ask for some immediate return on their efforts. And there is also a tendency on the part of researchers to promise more than they can or should give -- partly out of empathy for the teacher's needs and partly as a way of gaining the teacher's approval and participation. The whole issue of roles and relationships is further complicated when one is seeking to develop interactional styles that are less distant and impersonal than those of "traditional" research. There appears to be a mixed and somewhat confusing message when the researcher says, on the one hand, that she will not serve in a consulting, advisory capacity, but on the other hand, that she wants to establish a collaborative relationship. Ms. Edwards' question was the beginning of our attempts to strike the precarious balance between distant, objective researcher and caring, empathetic listener.

The conversation with the three teachers ended abruptly as small children began to pour into the room. The teachers said they needed to consider our request and would call us within a week. We thanked them for their time, apologized once again for our jumbled words, and left feeling disheartened and discouraged. We decided to write them clear and precise letters about our research that might make our hasty presentation more understandable and acceptable. We felt we had truly entered the world of schools -- a world that provides little space or time for elaboration or deliberation, a world of bells and buzzers, a world of schedules and deadlines. Because of the nature of our visit, we expected that the teachers would most likely turn us down.

One week later, when we had not yet heard from them, Chao called the Outer School and was informed that Teacher R. had agreed to participate, that Teacher E. had been sick for several days, and that the third teacher had declined. We waited for Ms. Edwards' return to health and Carew arranged to drop by her room after school one day for an informal chat. In this conversation Carew admitted our special interest in minority children and Ms. Edwards revealed her special willingness to cooperate with black researchers. She had never known any black researchers before; she wanted to help us because we were black; and further, the fact that we were black (and the impression she had gained of our personalities) had persuaded her that our intentions were good and that we could be trusted to use the research for altruistic, rather than self-serving purposes. Carew also had the impression that Ms. Edwards simply felt more comfortable with the idea of being observed by non-whites and of developing a personal relationship with non-white professionals. She was the only one who directly alluded to our race in the many face-to-face conversations that we had in our long quest for a research sample.

Chapter IV

The Social Context of School and Community

In this study we have been primarily interested in describing and documenting interactions between teachers and children within classrooms. We have looked at life in classrooms through various methodological lenses in order to gain a comprehensive vision of the complex and subtle processes that occur in these social contexts. Although classrooms are highly ritualized and anticipatable environments that seem to present universal phenomena, they are also unique and complex social settings, each with its own developed social structure, interaction patterns, styles of communication, and curricular substance. It is both the particular (with all of its complexities, surprises, and irregularities) and the universal that interest us in our multidimensional analysis of classrooms.

Although our teacher-child observations and interviews have documented structures and patterns within classrooms, we do not view the classroom as an isolated and autonomous setting. Rather, we view the classroom and its inhabitants as being in dynamic interaction with the social contexts in which they are embedded. The influences of family life, social class, ethnic and racial history, political and social ideologies reach the school directly each day through students and parents, through the perspectives and methods of teachers and administrators. The streets children negotiate to get to school, the people who live and work along the way, the houses or apartments where families live, the nature and quality of the social networks within the community are all important influences on the social, psychological, and educational forces at work in classrooms. Classroom life, therefore, is very much shaped and constrained by the norms, values, and traditions of the school, and likewise, the school is an integral part of the community which surrounds it. Each of these social systems (i.e. classroom, school, community) has its own structural arrangements, cultural idioms, and functional purposes, but they are also greatly influenced and sustained by the existence of the others.

In the next several pages, we will offer a brief description of the schools and communities surrounding the classrooms that we studied in depth. This will not be a comprehensive, ethnographic analysis of these contextual environments because that would require another study. But we will present a selective, journalistic account of some of the socio-cultural and economic realities of community life that we perceived as highly significant to the identity and culture of the school. We will also describe the school as a social setting with an organic life and momentum of its own and which becomes the most immediate, determining force in the lives of teachers and children inside the classroom.

What follows, then, is not a true community study of Charleside, or of the two school districts in which we worked. Rather it is a crude map of the territory in each district, one that tells approximately where things are without attempting to explain or rationalize them. It tends, if anything, to be an "official" map of the places described, reflecting the perspectives and views of those in the city and school administration. The issues in each school and neighborhood may have many other important dimensions not discussed here. It is the existence of these complex issues, not the details of them which is important. Awareness of their critical importance helps to flesh out the background against which daily classroom activity takes place.

The City of Charleside

Charleside has an image both nationally and locally as a city of intellectual and academic activity. Such an image can be traced in part to the presence of a prestigious University and renowned Technical Institute as well as the myriad of other educational institutions in the city. Although academia seems to dominate, the numbers of students, faculty, and others associated with higher education are small compared to the families which make up the majority of Charleside residents. While colleges and civic interest groups periodically oppose one another on some issue of administration policy or practice, most of the daily experiences of Charleside residents go on without reference to university life. Many Charleside residents never go near University Place and most have never been inside the walls of the campus.

In fact, much of Charleside is populated by working class families whose members work in the light manufacturing and service industries common in this area. Heavy truck routes criss-cross the city and most residential neighborhoods are characterized by large frame apartment houses, usually built for three or more families. In some neighborhoods, these dwellings have been divided into smaller apartments for students or poorer families.

Charleside has a rich diversity of people from various ethnic, racial and cultural backgrounds. In general, it is this diversity and distinctiveness of neighborhoods which characterize Charleside. Many people grow up and live in or near their old neighborhoods. They like to stay near family, neighbors, and childhood memories, much like the young receptionist at the Charleside Housing Authority who told a friend that she was going to give up her job because it would require her to travel to an office in Fairfax which may have been a few blocks away. "Nah," she said, "I don't want to do that -- I'd have to go all the way out to Fairfax." Neighborhood boundaries are clearly defined and most people do not want to venture into unknown territories a few miles away. For the most part, neighborhood lines do not symbolize hostile or exclusive turfs; rather they reflect cohesion, community, and sense of familiarity and comfort.

Like the neighborhoods surrounding them, public schools in Charleside also have distinct identities known more or less to the local population. The Churchill School is next to the dormitories at the edge of the University and has an image of high intellectual exclusivity. Houses in the Churchill district are said to cost twice that of comparable houses in most other areas of the city. The Bristol School, also near the University and encompassing a section of the city occupied by professional people and former college people, is said to attract parents with progressive and non-traditional political and social views. The Jordan School, in East Charleside, is located near several low-income projects housing 1,800 school-age children mostly from poor and minority families. Although these schools are closely identified with the neighborhoods they are in, they also have distinct reputations, and like most knowledge that is "common" and "public", they lag behind reality. Not unlike Charleside's University-dominated image, such reputations are often half-true and persist long after the circumstances which created them have changed.

Among the thirteen districts in Charleside, the two chosen for this study are particularly varied in the races and classes of families who live within their boundaries. The Outer and the Inner School districts are notable for the variety of families enrolled. They are perhaps more reflective of the range and diversity of families throughout Charleside than most other districts. As a matter of fact, there are few more varied social settings in the city.

Charleside School Administration

Like most urban school districts, Charleside has an entire central administration staff devoted to Primary Education. In addition to the Superintendent for Primary Education, a Director of Primary Education supervises the staff of specialists for all subject areas such as reading, math, and social studies who plan curriculum and offer workshops for teachers. Other specialists rotate among the schools for the actual teaching of subjects like physical education, music, and art. The central administration establishes policies regarding enrollment, special programs, standardized testing, and the range of diagnostic and psychological services available through the city's Bureau of Pupil Services.

Increasingly the district has grappled with the coordination of specialist services to schools and classroom teachers. The need for such specialists and the need to regulate their activity has increased dramatically with the implementation of a state law, Title I, concerning the integration of children with special needs into regular classrooms. In addition to the subject-area specialists available to the schools, the Bureau of Pupil Services also provides for guidance counselors (upper grades), school adjustment counselors (primary grades), learning disabilities specialists, speech therapists, physical education teachers and home adjustment counselors who make home visits to families with children served under Title I.

One requirement of this legislation is to make more frequent use of diagnostic tests for the detection of emotional and/or learning problems. These tests are referred to by parents and teachers as CORE evaluations and may be done in part or entirety. A child receives a "full" CORE evaluation when he is going to be absent from the classroom for more than 25% of the time, and it usually results in a step-by-step individualized learning program involving at least one specialist on a regular basis. A full CORE includes five parts: a medical assessment by a doctor; a psychological assessment by a clinical psychologist; a home assessment by a social worker, guidance counselor, or nurse; a teacher assessment by the teacher who has worked most closely with the child in the past year; and an administrative assessment which includes a paper review of the cumulative school history of the child. A "partial" CORE follows the above procedures minus one of the five assessments and usually results in some individualized plan for the child followed by the classroom teacher, along with occasional work with outside specialists. Parents, teachers, and other school personnel can initiate a CORE evaluation by going to their principal and requesting one. If the principal is satisfied that everything available within the "regular" school program has been tried, he will begin the diagnostic and evaluative process. Principals, however, must respond to a parental request for a CORE evaluation.

The large increase in the number of specialists within Charleside schools and the number of children defined as having "special needs" has dramatically affected the quality of self-contained classrooms and the nature of the classroom teacher's role and function. Many teachers are frustrated by the continuous interruptions of children moving in and out and find it difficult to maintain an orderly structure and rhythm within the classroom. Some feel their "authority" as a teacher is undermined by the intervention of specialists, while others experience some relief at getting rid of the "troublemakers" who might disrupt a peaceful classroom. Sending children to sessions with specialists is called "pulling out" in Charleside and both teachers and administrators recognize it as a major procedural, structural, and political issue within the city's schools.

The Inner School District

The Inner School Neighborhood

The Inner School is located in one of the smaller Charleside school districts; the district is a jagged triangle with one side of four city blocks and another of ten. It is bounded by Charleside's major trafficway, Constitution Avenue, and by the river on another. On one side it encompasses University housing; on the other is Market Square where, despite renovations to many storefronts, the general impression is that people shopping here come from working class or lower class backgrounds. There is a mix of people here: old and young; black, white, and Hispanic. Influences from many directions, from University Place and from Market Square, meet in the Inner district, but there is a sense of a cohesive neighborhood. Though people are diverse in race, culture, and education, one can go to any other part of the district and not feel out of place, out of the community.

Like most communities, areas of influence in this district follow some residential landmarks: the school itself with its three mustard-colored concrete buildingsclose to the street, and Arbor Estates, a collection of three-story brick apartments with neatly kept yards. This is one of the city's oldest and most respected subsidized housing projects. It is also the site of much community leadership. In recent years, Arbor Estates residents have complained of its "going downhill" and are alarmed by evidence of drug traffic and crime within the buildings.

Between the school and the river three blocks away is another housing project, more isolated from the rest of the community by its high-rise towers and off-street play areas. This glass and concrete complex is the University's married graduate student housing and is inhabited by families from all over the world.

Another border for the district is Commerce Boulevard, a heavily travelled one-way street that pours trucks and cars out of Charleside and onto the highway across the river. During the 1940s and '50s this was a quieter avenue lined with trees and the homes of middle class black families. Now it struggles to recover from being, in the words of a city housing official, "one of the city's major abandonment areas". It is beginning to look less neglected. Residents and housing staff are working to reduce truck traffic and many damaged buildings have been or are being repaired.

Just off Commerce Boulevard and on through the neighborhood to Market Square, the community is quiet, well-worn, densely crowded with three-family apartments and small single dwellings. Nearly all are wood frame houses with faded paint. Most of the streets are small and many are even too narrow for trees. What few yards exist are enclosed by hedges or chain link fences. A single exception is an old brick house whose large yard is filled each summer by an old gardener with corn, squash, tomatoes, beets, and other vegetables and flowers. Some years ago a few Charleside professionals or students bought and renovated houses at the edge of the district. A few left after break-ins occurred; others appear to have stayed. Mostly, however, people with children in the Inner School do not own their houses; property values are too high with the University so close. They live in apartments or flats which may cost from $180 to $350.

The Inner neighborhood, once familiar and safe, seems to be experiencing the beginning of deterioration. The fact that many of the houses appear somewhat shabby some residents attribute to the city's rent control policy, which keeps rents low but discourages building upkeep. Others cite a general increase in crime and negligence of property in the past few years. Teachers at the Inner

School are starting to complain of senseless vandalism to school property and of finding their car tires slashed. Some parents fear for the safety of their young children who may be bullied or robbed of their lunch money by older children as they come and go to school.

Although the dangerous aspects of city life are evident, there is a vital community spirit in this neighborhood. There is a lot of life on the streets and much of it happens near the school. Jazz and rock musicians and their audience regularly appear at the nightclub on the corner of Commerce Boulevard. There are clusters of young kids, sitting on stoops, playing tag in the street, making up games, and watching passersby. Usually there are groups of older brothers or sisters or neighbors nearby who keep an eye on the younger ones. Pairs of men and women lean against fences or sit on porches talking. A craft center across the street from Arbor Estates has steady traffic of customers for yarn, books, craft supplies; most are white and dressed in the slightly shabby style that is conventional among students in Charleside. Near the University housing, people on the streets are often small family groups: mothers and children or fathers and children from India, Korea, South America and other countries.

For young people there are two additional centers of activity. One is the Charleside Community Center located in a newly painted and renovated house on a quiet street. A new playground for younger children is outside; the inner center offers activity and group projects that attract many neighborhood adolescents and young adults. In addition, the Charleside Community School program, using the Inner School after school hours and weekends, offers facilities for athletics and classes in topics from homemaking to health to parenting.

In this neighborhood, many of the established community and school leaders are black; many of the continuing relationships between the Inner School and the community are maintained by black families living in and around Arbor Estates. Occasionally, because some of these parents are outspoken and represent more radical views on community participation in schools and politics, they are looked on by some as "troublemakers". Yet city and district administrators speak of these parents as a positive influence on community-school relations.

Since it was built in the 1950s, Arbor Estates has been a relatively stable community. In describing the project one housing official elaborated that families stay in these apartments, that many members of families are regularly employed, that families are eager to move in, that few problems with residents and maintenance are reported here, and that residents are active in tenant organizations and involved in community affairs. The community image of Arbor Estates is slightly more tarnished than the official perception of the housing authority. There are frequent complaints from residents of vandalism, drug traffic, and crime within the buildings. By Charleside housing project standards, Arbor Estates is small: 123 apartments. Partly because of the number of working people in these apartments, rents are slightly higher, on average, than those for other projects. Rents range from lows of $30 a month to a few highs of $225 and one or two at $350. The relatively high rent paid by some tenants not only reflects the employment there, but seems most directly related to the generally very low turnover -- a rate that is among the lowest for subsidized housing in the city.

Rents in the University housing project, on the other hand, run from $225 to $400. Although parents from this complex are often quite vocal and visible while their children are in school, as graduate students they are considered by school staff and other community people to be basically elitist, transient, and unattached to the community. The Inner School's principal says that he can count on the University community to supply about 50 children every year but that these children are always concentrated in the lower grades. Being students, he explains, the parents aren't usually old enough to have children in the upper grades, and by the time their children have reached the upper grades, they're gone.

The Inner School

The Inner School's master, as principals are called in Charleside, has his own perspective on the district community. He grew up there. Now in his 50s, Steven Hamilton has been at the Inner School, and before that at the previous Armstrong School, for many years. He recalls living "just down the street" from the present site in a cold water flat with his widowed mother and brothers and sisters. The neighborhood was always diverse, he recalls, and full of hard-working people. Many were not far from being poor then, as now, but basically he sees the community as a "family neighborhood". While Hamilton remembers earlier days in Charleside as seeming simpler, he is firmly planted in the present. It's sometimes difficult to get parents into the school, he says, unless there's something they don't like; but once in the school, he believes that he shares with them a basic objective: the "best possible" education and environment for their children.

Mr. Hamilton wants visitors to appreciate the complexity of the school and of the children and parents who live nearby. He spoke warmly of the long-delayed dedication of the five year old building and of the rows of parents holding hands and singing "We Shall Overcome". As a white administrator in this neighborhood where much parent leadership is black, he has not limited his role to beaming at dedication services. He has talked and disagreed with, listened to and accepted criticism from, the more outspoken parents in the district. During one visit to his office, Steven Hamilton interrupted the discussion to take a call from a mother of a former student at the Inner School. It was October and she was calling to ask where her child should be enrolled.

"Did you call the Metropolitan School Department?" he asks.

"Did you get the transfer card you need from us?" and then not unkindly,

"Where has he been the last six weeks? He should be in school." While visitors wait, he searches the telephone directory for the number of the appropriate office of the Metropolitan School Department. "You call this number," he says, "and do what they tell you to enroll him. If you have any trouble, call me back at this number." He is patient, clear, and direct. He gives an impression of fatherliness that is a welcome stereotype: firm and decisive, sentimental at times, and very intent on being fair although this does not mean to him that everything is equally valuable.

Mr. Hamilton is proud of the school, but concerned that it is a big and pretty complicated environment for an elementary school child to comprehend and negotiate. Having recounted a long list of the school's facilities, he suddenly shrugged and said, "Why, we've got a whole city here." The Inner's enrollment remains fairly steady from year to year at about 550; of the 27 regular homerooms, six are special classes for children served under Title I. Like other Charleside schools, this one has facilities for music, art, lunch, physical education, and the services of many specialists.

From the outside, the Inner School doesn't look that big although it consists of two connected three story buildings that are its main body and an attached Building B with two gymnasiums and music room. Its warm mustard yellow color minimizes the size and the look of concrete, and unlike in many modern schools, several windows look out onto Arbor Avenue. The school is close to the street and glass panes beside the front door seem to invite one to look in and enter the open central hallway inside. Around the central stairway here are large color paintings made by children to show where they came from. They extend all around the hallway; Africa and India are prominent.

A community well-baby clinic used by local families is just inside the front door, along with the school nurse and a dental hygienist who is there regularly. Beyond this central space there are 39 classrooms, a modern science laboratory, a greenhouse, home economics and art rooms, and a shop. Elsewhere two rooms of Head Start classes meet every morning and another two rooms house the Day Care Center. With the Community Schools program keeping the school open in late afternoon and evenings, this is a busy place.

Since last year, the Inner School has also housed a separately funded and primarily parent-governed school-within-a-school: the "Charleside Open School". Its four open-style, non-traditional classrooms serve children from kindergarten through third grade. Its presence has allowed parents to see and choose alternative learning arrangements and be involved in a greater degree of parent participation. It has also raised a number of questions for teachers, administrators, and parents about how to best educate children, run schools, and develop new solutions to problems in education.

Because of the Open School and its impact on the "regular" school during its first year, the recent history of the Inner School as a social organization points more than usual to the role of parents. One might, in fact, overemphasize the importance of the new Open School and its four classrooms on the remainder of the school. The majority of classrooms at the Inner are regular ones; that is, they are flexibly arranged by seating and daily routine to reflect the style of the teacher and the age of children. Most of these teachers are not committed to the open-classroom model -- their philosophies of education, modes of presentation, and classroom social structures reflect a wide range of pedagogical approaches. It was in these "regular" classrooms that the observations of teachers and children described in this book were done. Although analysis of the impact of the Open School on life at the Inner School is not appropriate here, it is important to recognize that these two school cultures were not always in balanced equilibrium, and were sometimes in conflict. The presence of these four open classrooms created a sphere of influence which surrounded classroom teachers, children, and less directly, parents during the year of observation

The divisions and tensions between the open and regular classrooms were not the only pedagogical and philosophical differences recognized by parents and teachers at the Inner School. People who know the school well also made distinctions between the quality and styles of education in the lower (kindergarten through third grades) and upper schools (fourth through eighth grades). The primary grades at the Inner are generally regarded as educational settings of superior quality. During the past few years, first grade reading scores at the Inner have been the best in the city. The upper grades, however, have not enjoyed such a high reputation. As children move into the upper grades, their test scores decline, the classroom environments become more rigidly traditional, and the teachers seem concerned primarily with maintaining discipline and order. The primary teachers, often proud of the talent they have nurtured in their young charges, worry that their hard work will be undone as the children progress through school. Parents often express concern about the general deterioration of educational quality and standards as their children grow older.

Recent History

During the three years that the Inner School was under construction on the site of the original Armstrong School, all 12 classrooms and administrators occupied temporary school quarters a few blocks away. Rooms were very small and indoor-outdoor carpeting covered plywood floors that quickly wore out. Mr. Hamilton nevertheless described that period as "cozy" for children and faculty alike. City school administrators as well cited this period of "camping out" under adverse physical conditions as one factor contributing to the unusual unity they perceive among faculty at the Inner School.

When teachers and children moved into the new building in the Fall of 1972, additional faculty were hired and all faced the establishment of a workable, more complex, and much larger school. Partly because federal funds had been used for construction, the guidelines for racial balance in this school were more stringent than for other Charleside neighborhood schools and this had implications for the direction of the Inner's growth. No more than 50% of the school's pupils may be non-white. This meant that the open enrollment policy in effect for all Charleside students (enabling them to enroll freely in districts other than those in their neighborhood) would be interpreted differently for the Inner School. Children would only be admitted under open enrollment if they contributed to racial balance. In a neighborhood with a sizeable black population and a number of student families routinely coming from Asia, Africa and South America, this essentially meant that the enrollment of outside minority students at the Inner would be limited, while enrollment of white students there would be welcomed.

The racial balance regulation became a significant issue in establishing the Open School within the building. According to administrators in the city superintendent's office, the push for an Open School came from some parents whose children could not be taken (because of limited space) in the Charleside Alternative Public School, a K-8 non-traditional school which enjoys full district status in the city although it has no geographical district of its own. The Charleside School Board agreed to the formation of a new Open School to be funded by a special grant for innovative programs, but they were faced with the problem of finding a physical and administrative home for it. Not only did the Inner have some limited extra space at the time, but it was thought that the presence of the Open School might help attract other white families to enroll their children in the regular Inner School. A good many of the families interested in the Open School were professional people, many white and relatively well educated. It was agreed that families enrolled in the Open School would not be considered in calculating the Inner's racial balance for the school at large. The parents at the Inner School and those interested in the Open School, however, also agreed that half the children in the Open classes would be from the Inner district and half would come from outside the district.

Despite the equal sharing of these special classrooms by Inner and non-Inner district students, the Open School's first year was not an easy one. Parents of children in regular classrooms became somewhat disgruntled by what they felt were inequities in resources, supplies, and staff aides between the regular and the open classrooms. As they saw parents of open classroom children participating in decisions about curricula, teaching, and other classroom activities, they began to question their own limited involvement in policy-making. Their frustration was heightened in some instances because they were more diversified and had little consensus among themselves about what and whom they wished to influence. As a separately funded entity, the Open School pursued different routines than the regular Inner School which often presented problems for teachers and administrators. Regular teachers located near the open classrooms complained that noise levels were distracting and that the children were often undisciplined and wild. Open classroom teachers were given much more staff assistance from aides and were allowed time off for staff development workshops to plan classroom activities;

such benefits were not afforded the regular teachers. And, although the master of the Inner School was responsible for the physical safety and administrative order of the open classrooms, he was not regularly involved with their parent governing board and had no authority to make policy decisions.

In the midst of this adjustment year, life went on in the regular classrooms. Primary grade teachers in both types of classrooms increasingly began to work together to plan materials and activities and to provide mutual support. Some of the problems faced by open classroom teachers were also faced by regular teachers. One major problem was that of "pulling out" kids from the classroom to work with specialists; teachers felt this was a major disruption to classroom scheduling and a significant disadvantage to the children whose school day was being severely fragmented. Steven Hamilton not only expressed concern about the confusion and fragmentation for "special needs" children but also thought that in general there was too much movement from place to place for young children to become "rooted" and comfortable in the environment. During a typical week, for instance, even primary classrooms would go as a whole to the gymnasium, to the library, to the art room, and to the cafeteria each day.

The use of testing and school records was another issue of contention among teachers. Although Hamilton maintained that teachers liked the standardized tests for children because they helped assess how well both child and teacher were doing, there was clearly no consensus among teachers about the worth and appropriateness of tests. Some teachers trusted their own experience and diagnostic judgment of children's skills and aptitudes more than the "objective" evidence of evaluations and tests. Others complained that the labeling of "special needs" children was providing an easy excuse for lazy teachers who did not want to solve their own problems within the classroom. And there were those who feared the potential damage to children whose school records branded them with negative and pejorative labels they might never be able to break away from.

Testing became a source of tension between the teachers in the Open School and the regular classrooms because the former were generally opposed to standardized tests and grading. Therefore, teachers who inherited children from the Open School were often presented with incomplete and inconsistent records, and some felt at a loss about how to judge and evaluate these children's previous experience.

The presence of the Open School within the Inner raised issues that were far more complex and difficult to untangle than the single issue of expansion. Interestingly enough, few parents who enrolled children in an experimental, open-style classroom in the Inner School continued it for their child's third grade year. After two years (first and second grades) of the humanistic-expressive mode for their children, these middle-class parents seemed to want to return to the more traditional, time-honored models of education. So the tensions between the Open School and the regular classrooms were not solely based on struggles over physical space, unequal resources and facilities, or different administrative policies. The tensions were more deeply enmeshed in the subtle clashes between the educational philosophies and goals that each setting offered and symbolized. The "sides" and boundaries of these philosophical and curricular approaches were not clearly drawn. In fact, a sharp distinction between the Open School and regular classrooms might have made their co-existence easier. Parents and teachers on both sides seemed to feel some ambivalence (as with the Open School parents who chose to return their children to regular classrooms when considerations for their children's future began to be of serious concern) and this lack of certainty led to greater defensiveness and distrust.

Steven Hamilton was greatly concerned about whether the open and regular classrooms would ever be able to coexist comfortably. He always enjoyed the "family feeling" in his school and the rapid change and disruption that the Open School brought with it have been distracting to the sense of togetherness. He values roots and continuity -- both strong themes in the Inner neighborhood and school; and he hopes that the fragmenting effects of the school-within-a-school, the CORE evaluations and testing, the over-scheduling and movement of children, will not jeopardize the "family" tradition. The sub-master at the Inner School, a young and energetic black man, did not comment on the changes in his school, but in his assessment of the community, he concurred with Steven Hamilton. He grew up here too, and said "It's pretty much the same here. No, not much has changed in this neighborhood for years."

The Outer School District

The Outer School Neighborhood

The Outer School District occupies a much larger territory than the Inner School District, though enrollment at the Outer, 628 pupils, is only greater by about 75 children. Unlike the Inner District, the Outer is much too expansive to be considered a single community. From a glance at the city map, it appears to be the largest district in Charleside. Its shape is much like a large, tilted butterfly with a wing on either side of Magnolia Street. This street is a major throughway in Charleside for people going west from the city; it runs into the main commuter route to the suburbs. Size is one important reason why this district is not a clearly defined or cohesive community; the other is the history and diversity of its residents.

There are three readily identifiable groups in this district and their neighborhoods run into each other. The largest and closest to the school is the middle group -- in income, type of occupation, property -- all those things people mean when they say this is "a middle and working class neighborhood". A few in this neighborhood are college and graduate students, but most are people in civil service, public utilities, small business, and other blue and white collar positions. They are Catholic and Protestant, black and white, and most have lived here for many years, some for generations.

Farther from the school geographically and fewer in number are the upper-middle class, well-educated, and professional families. Most of these are white and live at the far end of the district in large, expansive houses surrounded by beautiful gardens. They live closest to the University and are the most thoroughly identified or affiliated with University life.

At the opposite and poorer end of the district are residents who live in and around the Park Terrace housing development. Most of these families are black and working class and some receive welfare. A number have moved from the ghetto areas of the Metropolis in hopes of finding better housing and a healthier environment for their children. Not only are these families generally poorer and more transient than others in the Outer district, but they are also identifiable as a group by their relative isolation from the rest of the district's population. There is no inner city ghetto at this end of Charleside, but within several blocks of each other are three medium- to large-sized housing projects with relatively large minority and lower-class populations. They are not, by any standards, considered the worst projects in Charleside; yet the neighborhood in which Park Terrace, Liberty Plaza, and Skyline Apartments are located is clearly set apart from the more "respectable" residential parts of the district.

There has been a good deal of change and some turmoil within the Outer district during the past four years. Administrators at the Outer School and in the central Charleside administration, however, believe that the Outer has gone a long way toward resolving problems arising from rapid growth and relocation in the district. But the Outer's image in the rest of the city has remained tarnished as people cling to memories of a more chaotic and disorganized period. While some of the problems associated with rapid institutional transformations at the Outer contributed to its mediocre reputation, the Outer's progress in solving such problems has not yet improved its public image. In 1975, the rate of student transfers from the Outer was higher than for any other city school (17 students transferred out of the school with 14 enrolling in neighboring districts), but this movement of students cannot be attributed solely to changes in district population. The transfers also reflect its relatively large size, its diverse population, and the presence of many other schools, both public and private, near the district's borders.

Before 1973, the Outer district was called the Glenwood School District with the school building located nearer to the more affluent area around Rutherford Street. Part of the Glenwood School's image derived from its proximity to wealth and professionalism. Most of these parents, who sent their children to Glenwood School, also were financially able to enroll them in one of several nearby private schools. Their decision, therefore, tended to be a deliberate choice based on philosophical, political, and educational notions. Once having opted for public schooling, they became a vocal, fairly aggressive force in the district and were most often perceived by teachers and administrators as powerful and threatening. Their homes in the Rutherford Street section exude solid affluence and fine Victorian architecture; the older houses in the area are in the square, federal styles of earlier years. In this section houses are among the best preserved in the city; money has been invested to keep up appearances. Most sit far back from the streets, their yards landscaped with flowering trees and shrubs. Others have spacious lawns and discreet fences. Even the newer houses here reflect care and money spent on modified roofs, skylights, modern landscaping, and other touches of individual style and taste. This part of the district is relatively quiet, stately, and peaceful. Although many families live here, it seems like an adult environment, undisturbed by the sounds and sight of children. There is no active street life and children's games, jumprope, and bicycles do not have to be contended with by drivers as is the case on some streets further down the hill towards the Outer School.

With the increasing enrollments in the district, the Glenwood School became too small, so the Outer School was built and finally completed in 1971. The new school was located deeper in the heart of the district's largest constituency, the working and middle class people who have lived in the area for generations. This area resembles the other working class neighborhoods of Charleside. As one nears the school, the number of two and three family apartment houses increases. These houses are as well-kept but harder-used by families over the years. They are lively in appearance, painted in yellows, blues, and greens. The yards are smaller, filled with maple trees and decorative flower beds. People take care to rake their leaves in the fall and shovel the snow in winter. Homeowners and long-time renters take pride in their sturdy dwellings and spend a great deal of energy on household maintenance and neighborhood cleanliness. There is a lot of life on these streets. Neighbors know one another well and engage in friendly chatter; children romp and play street games, and older people swing on their porches or sit quietly watching the activities of the young. There is a visible sense of extended families and of several generations under one roof.

In this area, there are three Chinese restaurants, several small repair shops, several neighborhood groceries, a couple of junk/antique stores, a hardware store, nursery school, tiny storefront French restaurant, a store with home-made children's toys, fruit and vegetable produce companies and several gasoline stations.

The Outer School is located in the heart of this lively neighborhood but traffic patterns make it easier to see than to reach unless one knows how to get there. Most passersby see it from behind as they travel along Magnolia Street. From there it is a long expanse of concrete and small windows across a flat, featureless playing field. Next to the playing field is the Charleside Armory, flanked by the inevitable rows of khaki trucks and equipment. It is easy to imagine that the bunker-like school building is part of the Armory when seen from that direction, and the Outer's master confirms that people often do make that mistake.

North of Magnolia Street, the three-family frame houses continue and upkeep is good, but one begins to reach open spaces. A couple of ball fields and playgrounds are well kept and well used. Behind these, stretching to the railroad tracks on the far side, are the marshy and weed-choked acres used as the Charleside dump. Most of it is too rough for playing sports, and too sparsely grown for exploring. Years ago much of this expanse belonged to a family-owned brick works and the acres of marshland were turned over and stripped for the clay to make bricks. Groups of French Canadian immigrants, experienced brick makers, came to live here and crowded into the frame apartments owned by the company. As they settled, workers moved to the other side of the marsh and built a church that still is the center of a French Canadian and Irish community around the nearby Kavanaugh School. The homes they left, however, look worn despite the efforts of newer residents to paint and fix them up; they appear to have housed many people. Along this street is the new Park Terrace project built in 1973 by a private developer for low and moderate income families. It is a long stretch of repetitious concrete two-story apartments, distinguished by large alternating stretches of color which serve as the background for super-graphic numbers identifying the buildings. There are few trees or greenery around -- the feeling is one of great expanses of modular concrete.

Despite the open spaces and playgrounds nearby, the houses hug the streets with little extra room for yards or garages. Presently, most families in Park Terrace are black. Although it is relatively new and in decent repair, Park Terrace projects the image of potentially rapid decay, and it is located closer to the older and relatively more neglected projects of North Charleside than it is to the more affluent sections of the Outer district. Just over the district line, for instance, is Liberty Plaza, a project of two and three story brick buildings. Although its appearance and maintenance have improved in recent years, it still has the look of housing whose residents struggle against the great odds of poverty and over-crowding. Also nearby are the Skyline Apartments, three forbidding brick and concrete high-rise buildings for low and moderate income inhabitants. A number of young black professionals and families live here as well as a relatively large proportion of white families. Flowering shrubs bloom at the edge of the parking lot in spring, but exhaust fumes are always in the air from the adjacent causeway and the buildings look cold, no matter what the season.

From this side of the district, it seems miles to the Outer School. In fact, it is perhaps 15 blocks away, but two busy streets are in between and the "psychological distance" feels vast. For safety purposes, children from Park Terrace are bussed back and forth to school. The bus ride increases the feeling of distance and isolation from the life of the school. Most other children independently negotiate the path from home to school or their parents deliver and pick them up. Even those who live just as far away in the direction of the University are able to walk to school because of the absence of heavy traffic and major highways. In some sense, therefore, the black children from Park Terrace do not experience the Outer School as a close and friendly neighborhood school, but as a far-away place that can only be reached by bus.

The geographical isolation of the Park Terrace area probably exaggerated the difficulty for many parents to become part of this newly constructed school-community. According to school administrators, many of the Park Terrace families with children starting at the Outer that first year had come from the Metropolis or out of state. These newly transplanted parents not only experienced isolation from the Outer School but also had to endure the turmoil and dislocation within their housing development. Originally built for low and moderate income families, Park Terrace soon had more than enough applicants to fill the apartments, but not the proportion of moderate income residents that developers had anticipated for a "balanced" environment. Because they had only seventeen subsidized units in the project, the Charleside Housing Authority had little interest in becoming involved in the administration of the project. Rather than turn away applicants and allow the building to remain empty, the developers agreed to permit tenants to move in at lower rents than they had originally stipulated and planned for. Disputes seemed inevitable and trouble collecting rents followed. A few, some say very few, evictions were made, and after an initial period of crisis and tension, the project is said to be more settled now. School administrators who are acquainted with Park Terrace families believe that some parents are beginning to emerge as leaders within the development and that, in general, it is beginning to stabilize as a small community.

The Outer School

The Outer School, on first appearance, seems to be one in which people must work to humanize the somewhat imposing physical structure. Like many modern schools, it is heavy on cement and seems to have few windows through which to look in or out. Inside, a central entranceway is dominated by a long angular carpeted ramp and open space of brick floors and concrete pillars. With a first sign eight feet up on the wall, visitors are welcomed; with a second just below they are advised to check in at the principal's office. As one walks toward the principal's office and the hallway leading to classrooms, a scattering of other bright, neatly lettered signs indicate that this is a school for children. For the most part, however, the sounds of children are not heard, and very few children are even seen, except at lunch, recess and school's end.

The master's response to comments about the physical scale of the Outer is to open a classroom door. Immediately the sense of structure falls away; inside is a warm, carpeted and busily decorated room. There is a lot going on behind the classroom door. Nooks and corners are arranged to make individual spaces or to display papers and projects. Children's papers are hung in profusion and desks and tables are movable. In this room, at least, there is not a single "eyes front" focus in the arrangement of furniture. So the life of children and teachers at the Outer School seems to be very different inside the classroom from that suggested by the hallway and external building structure.

Mr. Barry, the master, is a slight, middle-aged man who speaks in the language and style of an administrator who has been through many wars -- his words are measured, his statements are carefully calculated, and he avoids disruptive and controversial issues. In our first meeting with him before our study began, he limited his discussion of the school to some very general statements about bussing patterns, school population, and daily schedules. Although he was willing to introduce us to his first grade teachers, he did not want to take sides about whether they should agree to participate in our study. He assumed a very noncommital, neutral role and left the decision entirely up to the teachers. Although his stance might be viewed as a reflection of a democratic and responsive administrative style, it became evident over time that his general approach to decision-making within the school was noncommital, non-directive, and often left people wondering about "where he was coming from".

Most teachers we spoke to claimed he was a "nice enough guy" who feared the repercussions of offending anyone, so he never took strong and decisive stands. Teachers who had experienced conflict with parents complained that he was not their advocate and did not protect them from the intrusions and verbal assaults of overly-aggressive parents. And parents, recognizing his shifting allegiances and nebulous stances on policy issues, also complained of no strong administrative support and guidance.

In our last conversation with him, Mr. Barry was much more open and responsive than he had been initially; he talked at great length about the overwhelming size and diversity of the school population. He was especially strained by the minority of professional, affluent, and well-educated parents who were aggressive, assertive and "influential with the central administration". He seemed to fear their power and thought it best to avoid conflicts with them. Mr. Barry spoke nostalgically about his positive administrative experiences before coming to the Outer School. For several years he had been master at the nearby Whitney School, "truly a neighborhood school", which had a much smaller, more heterogeneous population. The Whitney School was absorbed into the Outer School and Mr. Barry misses the comfortable, familiar atmosphere in which parents trusted his judgment and children were more controllable and mannerly.

In the absence of strong leadership from the aster, the teachers looked to Mike O'Connor, the sub-master, for administrative strength, support, and protection. Mr. O'Connor seems to know the school inside out and has played an important part in maintaining contact between parents and the school. He is a slender man in his 40s with eyes that can watch intently as he listens, or hint at a twinkle as he makes a straight-faced joke. He gives the impression of having come up through the political ranks of the Charleside School Department and knows both its teaching and administrative ends.

Mike O'Connor's neighborhood experience goes back a long way: he grew up in the district, not far from the school's present site. It was he who described the early brickworks in the now abandoned marshland beyond Magnolia Street. He recalls that, as a child, the land where the Outer School now stands was fascinating marshland, just right for exploring with friends. His recollections of the area are unsentimental but not unfeeling.

O'Connor claims that 80% of the district's families are educationally conservative; "they believe in pulling yourself up by your boot straps and hard work." They have faith in the traditional skills, training and intellectual focus of schooling. The remaining 20%, he feels, are families whose intellectual expectations are high, intelligence above average, and who consider creative and affective processes to be part of the "basis" of an integrated and comprehensive education.

Teachers seem to think highly of O'Connor and to consider him the leader when relations with Mr. Barry are strained. Outside of faculty, his importance in the district has most likely been due to his willingness to initiate and maintain contact with parents. "I've been to houses in this district and I've been to projects," he says, "so that they know who I am." Especially with families new to the district, he says, "I try to make sure I still call some of those families ... especially when there's something good to say about a kid. Just so they know that every time the school calls, it doesn't mean trouble."

In this school, there are a myriad of people and issues to keep track of. Like the Inner School, the Outer is a big operation with a yearly enrollment of 628 children. It has 30 regular homerooms and four special homerooms of children enrolled under Title I. Among the 65 teachers are a number of specialists in the areas of learning disabilities, media, physical education, reading, remedial education, resource centers, and music. The school has a gymnasium, a cafeteria, auditorium space, a woodworking shop, and music and art facilities. A Community School program offers activites for many different age groups, including judo, exercise classes, Spanish lessons, and gourmet cooking. The participation of senior citizens in the Community School program is especially enthusiastic and energetic at the Outer School.

Historically, the school's enrollment grew in two convulsive leaps. The first came when the Outer was built and faculty and students moved down the hill from the old Glenwood School. They were joined that first year by the 7th and 8th grades from the increasingly crowded Whitney School in the next district. Two years later, the Outer opened in September with 200 new students from the newly inhabited Park Terrace. Juggling the economies of shrinking enrollments and high building costs, school district planners had identified additional savings in federal funds if the school could include the new housing project within its district. During that period, the strains and tensions within the Outer were easy to recognize, but the causes were complex. The near-double enrollment meant increasing the faculty by 50% in two short years. Not only were experienced teachers trying to make sense and working order out of the new school's structure, they also were trying to establish relationships with a very large number of colleagues, many of them in their first year of teaching.

With the sudden explosion in student enrollment, some parents grew increasingly concerned that rapid growth would bring deterioration in the high quality of education at the Outer School. Some were eager for new teachers to maintain high academic standards, while others were more concerned that teachers focus on helping new children from other cities and schools accommodate to the school and that a comfortable learning environment be created and sustained. Although many of the new families were black, the basic issue, according to the master and other school administrators, was not racial but one of "adjustment to change". Some parents, long accustomed to speaking out about "their" school, were eager to become involved and actively participate in decision-making, while the newcomers, many of them minorities, did not yet feel comfortable about establishing an aggressive presence in the school and did not relate to the Outer as "their" school.

During our year of research at the Outer, therefore, we saw a school that was beginning to recover from the fragmentation of rapid institutional transformation. With the expanded school enrollment, a large proportion of teachers had been recently hired, many of them new and inexperienced. The teachers had not had the opportunity to build supportive and productive colleaguial relationships and they often felt alone and isolated against the intrusions of frustrated and aggressive parents. The master's approach had been one of non-interference, a laissez-faire position that provided neither leadership and protection for teachers nor structure and receptivity for parents.

Not only had the population of the district increased enormously in the last few years, but the school had also brought together divergent groups from various social class, racial, ethnic, and educational backgrounds. The geographical distances and territorial boundaries within the district had intensified feelings of threat and discomfort among the various parent groups and had made it difficult for them to get to know one another. The more affluent, well-educated families from the relatively homogeneous and neighborly Glenwood School felt entitled to make demands of teachers and administrators and were perceived as the most powerful and feared group; the newly-settled, frequently black, lower and working class residents of Park Terrace were mostly isolated from school life and often felt demeaned and excluded by teachers and upper-middle class parents.

In the midst of all these divergent forces, it was impressive that in many of the classrooms teachers were able to build supportive and productive learning environments. Children and teachers must have experienced the stresses of transition and change, but the daily life of school went forward; and in the process of work and play, children and teachers within classrooms created livable communities.

Chapter V

Research Methods

A major theme of this book is the need for research on teaching to adopt a broader interdisciplinary approach employing a number of convergent methodologies. We have argued that in order to provide a balanced analysis of schools as a significant source of experiences in the lives of children, teachers and parents, several types of data must be integrated. These include information on the social structure of the classroom, school and surrounding community; empirical data on what goes on within the classroom including actual patterns of interaction between the teacher and individual children; and also considerable information on the teacher as a person -- her values, beliefs, objectives and perceptions, her upbringing, training and experience.

Education does not take place in a vacuum devoid of social ambience or real people, and relationships between teachers and children are not unaffected by the socio-political structure of the classroom, school and community which provide their context. Similarly, interactions between teachers and children are transactions between human beings who have distinct personalities, who perceive each other in particular ways, and who may have disparate motives for their behavior. In order to understand what the teacher is doing it is not sufficient simply to observe and record her behavior "objectively". These behaviors must be seen in terms of the teacher's perceptions, reasoning and purposes with respect to the class as a whole and the particular child with whom she is communicating. Admittedly, the researcher cannot intrude into the interactive process to question the teacher about her behavior. But there are interview methods that allow us to accomplish this retrospectively and the qualitative data they provide are, in our view, central to understanding events in the classroom.

Finally, the need for research on teaching to document individual interactions between teachers and children can hardly be overemphasized. Each child encounters a unique array of experiences in the classroom, the degree of variation depending in part on the extent to which the teacher individualizes her teaching and exposes children to different social arrangements, curriculum and materials and in part on the latitude children have to create their own experiences and mini-environments within the classroom. Empirical documentation of teacher-child interactions requires direct observation in the classroom, repeated sufficiently often to ensure that the observed behaviors are truly representative of typical transactions between the teacher and her pupils. Observations must also be made over a sufficiently long period of time to detect changes as teachers and children impact on and adapt to each other. Further, a complete account of life in classrooms should include both teacher-focused and child-focused observations for these two methods may provide complementary or contradictory data depending on how dominant and controlling a force the teacher is vis-à-vis children. The more scope given to children to pursue their own activities, the more limited and misleading are teacher-focused observations as descriptions of life in classrooms. But child-focused observations are helpful even in the most rigidly controlled class since, even here, children will find opportunities to create their own worlds if only by tuning out the teacher and passively resisting her directives.

In this chapter we shall describe the various methods and types of data that were used in this study. In addition to the ethnographic descriptions of the schools and their surrounding communities described in Chapter IV, these included (1) observations of classroom structure including the assignment of children to hierarchically ordered reading groups and to various seating arrangements, (2) repeated observations of the interactions of teachers with individual children in the context of various classroom activities, (3) repeated observations of the behavior of selected individual children in contexts in which they were not directly interacting with the teacher, and (4) interviews with teachers, administrators, parents and children.

Sample. The sample consisted of four first grade classrooms in two schools, the Inner and Outer Schools, belonging to the Charleside public school system. The Charleside public school system was selected for this study because for many years it had had a more socially and racially heterogeneous enrollment than the other systems potentially available to us. The four classrooms used in this study turned out to be similarly mixed in their racial and social class composition, although as the ethnographic description previously given suggested, the two schools and surrounding communities differed substantially in numerous ways.

The four sites might all be described as "traditional" public school classrooms although none of the teachers felt comfortable with this label, since they perceived their classrooms as more of a blend of traditional and open modes. Each was taught by a single teacher -- Ms. Allen and Ms. Prima at the Inner School, Ms. Edwards and Ms. Ryan at the Outer School. In some of our observations a student teacher or other assistant helped out but the main teacher was always present and in charge.

Classroom structure. Each classroom was visited 19 to 20 times over the course of the school year. Toward the end of the first quarter information was obtained from teachers as to the ranking and composition of reading and math groups and when and on what basis children had been assigned to different groups. The actual composition of reading groups was recorded whenever they were called during our observations in the classroom. Similarly, teachers were asked to describe the seating arrangements in their classrooms and their reasons for using particular patterns and placements. The actual location of each child's desk in the classroom was noted and the overall seating arrangement repeatedly sketched during our visits to the classroom.

Behavior observations. One of the principal research strategies used in this study was direct observation of teacher and child behavior. Observations began with an initial orientation period followed by four phases of data collection in the four quarters of the school year. In the orientation period one observer visited the school to explain the research procedures, to obtain information on the teacher's weekly schedule, convenient times for visits and class lists, and to familiarize herself with the setting, seating patterns and the identities of children. Each classroom was then visited by one of two observers approximately once per week for five to six weeks in each quarter of the school year. Each visit typically lasted about two hours with observations as far as possible evenly distributed across days of the week and times of day. However, visits seldom took place on Fridays (notoriously a "bad day" for teachers), nor did we observe activities that took place outside the classroom with someone other than the main teacher such as art, music, gym, recess and lunch, nor the private tutoring sessions that several children regularly had with specialists.

The main purpose of the classroom observations occurring in the first half of the school year was to observe the behavior of teachers in the interactions with children. In contrast, the chief aim of the visits scheduled for the second half of the school year was to record the behavior of selected individual children when they were not interacting with or being attended to by the teacher. Table 1 shows the observation schedule and amount of coded observation time per visit.

Table 1 about here

Teacher-focussed observations. Two observational schemes, the Structured Interaction (SI) and Unstructured Interaction (UI) systems were developed to record and code interactions between teachers and children. The SI system was freely adapted from the Brophy-Good System (Teacher-Child Dyadic Interaction) (1970). To gather these data the observer, equipped with stopwatch and the Structured Interaction coding form, focussed her attention on the teacher, watching her behavior and that of children with whom she interacted during the first 30 seconds of each minute, then coding or recording these communications in the next 30 seconds. Whether or not the observed interactions were coded immediately on the Structured Interaction coding form or described and coded later on the Unstructured Interaction form depended on the kinds of behavior that actually ensued. Most behaviors occurring in question and answer sessions, reading and math groups, evaluations of seatwork and the like could be coded on the spot in terms of the pre-set categories of the Structured Interaction system. Behaviors that did not fit into these categories and all behaviors initiated by children were described in a comment section of the SI and coded later in terms of the complementary coding scheme, the Unstructured Interaction

(UI) system. The UI was designed to capture the less predictable behaviors occurring in structured academic activities and also the much wider range of behaviors taking place in interactions concerned with non-academic topics, procedure and behavior control.

Below in Table 2 are listed the main variables that enter into the quantitative analyses presented in this book. Several variables included in the complete SI and UI systems do not appear in Table 2 because they occurred too infrequently to warrant detailed analysis. These variables were either combined to form composites or eliminated from the data analysis. The complete SI and UI coding systems and procedures for combining and analyzing variables are described in Appendices A and C.

Table 2

Teacher-Focused Observations

Overall Context Variables

Variable	Definition
Activity Context	
a. Academic	Includes subject matter lesson; reading and phonics; math; penmanship; work recitation; seatwork; paperwork review.
b. Non-academic	Includes non-academic activities that are typically structured by the teacher (e.g. story-telling, Simon Says) and non-academic activity in which the teacher usually does not participate (e.g. play with toys and games).
c. Other	Includes class routines and transition periods between organized activity.
Number of children involved	Whole class versus subgroup.
Child participants	Identity of each child involved in the activity.
Rank of subgroup	Rank of reading or math group.

Structured Interaction (SI) Variables

Variable	Definition
Recipient	Identity of child recipient.
Interaction Topic	The topic of a specific interaction. This interaction topic may coincide with the overall activity context (e.g. in a reading activity context, T teaches reading) or diverge from it (e.g. in a reading activity context T asks C to count). Only academic interaction topics are coded in the SI, as defined for activity context (a) above.
Teacher Behaviors	
Makes open vs. direct demands	Open: T asks C to answer a question or perform a task after waiting for sign that C wants to do so (e.g. hand-raising). Direct: T directs question to C or directs C to do a task without waiting for sign C wants to do so.
Asks free vs. process vs. product question	Free: T asks question with no right or wrong answer. Process: T asks question that requires C to think through answer or figure out solution; T provides information demonstrating thinking through/problem-solving process. Product: T asks question or makes work demand having a single right answer; T provides single right answer.
Provides assessment vs. no assessment	Assessment: T provides feedback to C as to whether his response/work is correct/complete or incorrect/incomplete. No assessment: T does not provide such feedback.
Gives positive vs. negative evaluation/reinforcement	Positive: T praises C's response/work/behavior. Negative: T criticizes C's response/work/behavior.
Sustains interest by asking new question vs. repeating question or giving a clue	New question: T sustains C's interest in task by asking new question. Repeat or clue: T urges C to respond by repeating question or giving a clue.

Unstructured Interaction (UI) Variables

Variable	Definition
Initiator	Identity
Recipient	Identity
Interaction Topic	
a. Academic	Same as for activity context (a)
b. Non-academic	Same as for activity context (b)
c. Other	Same as for activity context (c)
d. Privilege	T grants C special favor or privilege (e.g. T selects C to run an errand) or C requests a privilege.
e. Appropriate child behavior	T explicitly recognizes child's "good" or appropriate behavior, e.g. when C seeks opportunity to perform or helps others.
f. Inappropriate child behavior	T calls attention to child's "bad" or inappropriate behavior, e.g. when C annoys or disrupts other children or is inattentive to his work.
g. Health, distress	T responds to child's physical health, distress, discomfort, or fear.
Teacher Behaviors	
Gives positive vs. negative reinforcement	Positive: T praises C's response/work/behavior; T offers positive incentive. Negative: T criticizes C's response/work/behavior; T inhibits, reprimands, threatens punishment.
Grants vs. rejects C's request	Grants: T provides information, help, permission at C's request. Rejects: T refuses, defers information, help, permission at C's request.
Provides academic vs. procedural information	T instructs, explains academic vs. procedural aspects of a task.
Directs	T directs C to do a task.
Converses, plays, jokes	T engages in conversation, play, humor or affection with C.

Variable	Definition
Child Behaviors	
Appropriate	C engages in appropriate school behavior, e.g. seeks evaluation of work or performance.
Expressive	C expresses opinion, makes comment, jokes.
Dependent	C asks for information, help, materials or permission from T.
Inappropriate	C engages in inappropriate behavior, e.g. annoys or disrupts other children or is inattentive to work.

Each interaction between the teacher and an individual child that occurred in a 30-second observation interval was coded in terms of either the SI or UI dimensions listed above. The number of behaviors of a particular type were then calculated separately for each teacher, as a proportion of the total number of SI or UI interactions observed in her classroom over the 10-11 teacher-focused observations. This procedure allows us to compare teachers in terms of the relative proportion of time spent on different activities or on different types of behavior.

Differences in teacher's interactions with individual children. An important purpose of this study was to assess the extent to which teachers treated individual children differentially, as individuals or as blacks or whites, or boys or girls. To accomplish this objective, the observer identified the specific child participating in each interaction with the teacher (e.g. the child whom T asks to read; the child who asks T for help). First, in the data analysis the number of interactions in which each child was a participant was calculated as a proportion of the total number of interactions for which he was present and in which, theoretically, he might have participated. Next, the number of interactions dealing with a specific topic or characterized by a particular child or teacher behavior listed in Table 2 was calculated for each child as a proportion of the total number of interactions of that type in which, theoretically, he might have participated. To illustrate, suppose we were interested in knowing whether Ms. Smith treated children differentially so far as the number of academic questions she asked them in class was concerned. Ms. Smith's class consists of 8 children, 4 boys and 4 girls, and during our morning's visit we observe each of the following activities:

Activity	Children Included
Subject-matter lesson	All 8 children
Show and Tell	All 8 children
Reading Group 1	4 girls
Reading Group 2	4 boys
Math Group 1	2 girls, 2 boys
Math Group 2	2 girls, 2 boys

We record each time Ms. Smith asks a child an academic question in the context of these activities and find her questions are distributed among children as follows:

	Girls				Boys			
Activity	A	B	C	D	E	F	G	H
Lesson	2	2	0	0	0	0	0	0
Show and Tell	3	3	0	0	0	0	0	0
Reading Group 1	10	10	5	5	-	-	-	-
Reading Group 2	-	-	-	-	5	5	0	0
Math Group 1	5	5	-	-	0	0	-	-
Math Group 2	-	-	5	5	-	-	5	5
Actual questions	20	20	10	10	5	5	5	5
% Actual/maximum (=80)	25	25	12.5	12.5	6.25	6.25	6.25	6.25

Ignoring the fact that girls and boys are not always included in the same activities, we see that the maximum number of questions any one child might have been asked is 80. If Ms. Smith treated individual children equally, then the number of questions each girl and boy received should be 10 or 12.5% of the total. We find however that girls A and B were each asked 20 questions, twice as many as they should have, girls C and D received 10 questions, exactly as many as they should have, and boys E, F, G and H received only 5 questions each, half as many as they should have. If asking more questions is a form of favoritism, then Ms. Smith clearly seems to favor girls A and B, and her favoritism is evident in all activities that were observed, including subject matter lessons, Show and Tell, and reading.

Difference in teacher interactions with children as members of a racial or sex group. These hypothetical data can also be used to illustrate how one might determine whether or not Ms. Smith favored the girls in her class as a group compared to boys, in addition to favoring individual girls over other children. Comparing the average percentage of questions addressed to girls and boys, we are struck by the large difference: 18.75% go to girls versus 6.25% to boys. This discrepancy can be statistically tested and, if significant, provides presumptive evidence that Ms. Smith discriminates among children in her class on the basis of sex. If Ms. Smith's class included black and white children, or middle and working class children, we could determine in a similar way whether she discriminated on the basis of social class or race.

Child-focussed observations. One limitation of teacher-focused observations is that the child's behavior is not observed except when he is interacting with his teacher. But the teacher's view of the child is influenced by more than his interactive behavior with her (she may observe him at seatwork or in social interactions with other children, for example), hence even to understand her behavior toward him we must observe him in other contexts. In any case it seems important to know to what extent the child's behavior in the classroom corresponds to the teacher's description and/or warrants any exceptional treatment that he may receive. If Ms. Smith often criticizes and scolds John, is this because John more often misbehaves than other children whom she treats more positively? If Ms. Smith sees Mary as a sweet, helpful child, is Mary truly so or is she really a brat when the teacher is out of sight?

With these ideas in mind we selected four children from each classroom for intensive individual observation. Children were chosen on the basis of preliminary classroom observations and teacher's comments in the course of the first two interviews. Overall we tried to sample roughly equal numbers of boys and girls, and black and white students. However, particular children were singled out for observation not so much because of their race or sex but because their relationship with the teacher seemed to illustrate some significant aspect of her personality, values, beliefs or style.

These child-focused observations took place during our bi-weekly visits in the second half of the school year and were conducted when the children were engaged in individual seatwork or free play rather than in a structured activity such as reading or math. During each visit the observer observed each child twice for 15 minutes at a time, describing and later coding his behavior in terms of the variables listed in Table 3 and Appendix B. These behaviors are defined in much the same way as the corresponding child behaviors in the teacher-focused observation systems (the UI codes) and permit us to compare the child's behavior when he is and is not directly interacting with the teacher.

Table 3 about here

Interviews. Behavior observations per se seldom explain why people behave the way they do. To explain a teacher's behavior even superficially one needs to understand her upbringing; her cultural background, values and ideology; her pedagogical approach, objectives, skills and experience; her perceptions of the needs of individual children and how she sees herself as meeting those needs; her views of the racial, ethnic and social class groups to which children belong; and the reasons why she might like/dislike, be interested in/indifferent to particular children in her classroom. Thus, a major purpose of this study was to go beyond the blind counting of overt behavior to an understanding of the framework -- intellectual, ideological, cultural, experiential and emotional -- through which each individual teacher viewed her role as teacher and perceived the children in her charge. To achieve such insights we relied chiefly on information obtained in loosely structured interviews with teachers, children, parents and administrators. In our discussions with teachers, which altogether took between 12 and 18 hours per teacher, we used an informal and very flexible approach adhering generally but not rigidly to the content areas stated below.

Interview I. (December 1975) This interview concerned the criteria the teacher used in organizing children into reading and math groups. The teacher was also asked to describe each child according to the social and cognitive dimensions she viewed as important.

Interview II. (April 1976) This second interview was conducted after we had observed a few individual children in each classroom. The teacher was asked to talk about several children (including those whom we had observed), their progress, and her relationships with them.

Interview III. (May 1976) The third interview asked the teacher to describe how her own experiences and background might have influenced her educational philosophy, goals, and methods. In this interview we were particularly interested in exploring her motives for becoming a teacher and the importance of teaching in her life.

Interview IV. (May/June 1976) The fourth interview asked the teacher to describe her colleagues, the school and community and her perceptions of administrators and colleagues.

Interview V. (June 1976) The fifth interview was conducted just after the end of the school year. The teacher was asked to describe each child's progress and development over the course of the year.

Interview VI. (October 1977) The sixth interview was conducted after the classroom data was collected, analyzed and written up in preliminary form. Its purpose was to share the findings of the study with the teachers and to obtain their critical reactions to our interpretations.

In conducting these interviews we tried to be as open and as sensitive as we could to the particular teacher, covering the themes referred to above, but permitting teachers to introduce, elaborate, or curtail discussion of any topic they wished. We took this relatively non-directive approach because we believed that in order to gain an in-depth understanding of the teacher's perceptions, reasoning, and purpose, researchers must use interview strategies that get beyond superficial, protective responses. The teacher's answers have usually reflected her need to protect her self-image and her idealized notions of what a "good" teacher should say (often professional images instilled during her teacher training). Thus, the style and particular questions used in these interviews reflected our belief that an interviewer must first seek to establish rapport and a trusting relationship with the interviewee and that the most productive questions were often concrete, specific ones referring to actual behavior and experiences rather than broad, philosophical queries.

In addition to the many discussions that we had with teachers and school personnel, interviews were also held with the children whom we had selected for individual observation, with their mothers and with the two school principals. Interviews with children were conducted in a private room at the school and typically took a brief 15 minutes. Our main interest here was in finding out how the child felt about his school, classmates and teacher and whether he saw himself as especially liked or disliked by his teacher. Interviews with mothers took between one and two hours and were carried out informally in their homes. The main purpose of these conversations was to obtain each mother's views of the school, teacher and child and to note the points of correspondence and discord between her account and that of the teacher.

Summary. The main purpose of this research was to provide a balanced, many-layered description of life in first grade classrooms. To this end several different perspectives on the teacher, child and school were obtained including those of the parent, child, teacher, administrator, interviewer and observer. In the next chapter we emphasize only one viewpoint, that of the observer, as we examine the results of our classroom observations. In the second half of this book* this perspective no longer dominates but is integrated with others, equally authentic, as we attempt to construct multi-faceted portrayals of four teachers and some of the children who captured their special attention.

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*In preparation.

Table 1

Classroom Observation Schedule

I. Teacher-Focused Observations

Observation	Month (1975-76)	Coded observation time (minutes)[a] Allen	Prima	Edwards	Ryan
Scheduling visit[b]	October	0.0	0.0	0.0	0.0
Orientation observation[b]	October	0.0	0.0	--	0.0
Observation 1	October	42.0	53.5	33.5	25.0
Observation 2	October	21.0	46.5	41.0	36.0
Observation 3	November	59.0	43.5	15.0	67.0
Observation 4	November	25.5	28.5	25.5	62.5
Observation 5	November	52.0	68.0	25.5	54.5
Observation 6	November	51.5	57.5	61.5	34.5
Observation 7	January	53.0	36.5	47.5	53.5
Observation 8	January	59.0	55.5	55.5	52.5
Observation 9	January	37.5	57.0	54.5	79.5
Observation 10	February	55.0	54.5	63.0	83.5
Observation 11	February	58.5	56.0	50.5	--
Total coded observation time	(minutes)	514.0	557.0	473.0	548.5
	(hours)	8.6	9.3	7.9	9.1

II. Child-Focused Observations[c]

Observation	Month (1976)	Coded observation time (minutes)[a] Allen	Prima	Edwards	Ryan
1-3 visits	March	147.0	134.5	98.0	119.0
0-2 visits	April	45.5	--	61.0	--
1-2 visits	May	86.5	28.5	48.0	66.0
1-2 visits	June	49.5	95.0	79.0	87.0
Total visits per teacher (n)		7	7	7	7
Total coded observation time	(minutes)	329.0	258.0	286.0	272.0
	(hours)	5.5	4.3	4.8	4.5

[a] Refers to the amount of time spent actually observing the teacher's behavior. Thirty seconds of each minute the observer was working in the classroom was spent observing behavior and thirty seconds was spent coding or describing it. Thus the coded observation time is equal to half the actual visit time.

[b] The scheduling visit and orientation observation were not coded.

[c] Four children in each classroom were observed during each of 7 visits for which they were present.

Table 3

Child-Focused Observation Variables

Variable	Definition
Interactive	Whether the focus child interacted verbally or non-verbally with another person or persons or was not interactive.
Verbal	Whether the focus child spoke to another person or persons, or to himself, or was silent.
Exhibits appropriate or inappropriate behavior	Whether the child exhibited appropriate, inappropriate or neutral behavior, usually in interaction with others (peers, the teacher, other adults).
Receives appropriate or inappropriate behavior	Whether the child was the recipient of appropriate, inappropriate or neutral behavior from other children or of positive or negative reinforcement from the teacher.
Child activities	The predominant activity or event in which the child was engaged, e.g. Work: any academic task or quiet, constructive activity. Includes paperwork, reading, drawing, and class rituals. Play: any concentrated free time activity such as playing with toys and games, make-believe, and role-playing. Talk: conversation, social chitchat, comments other than about work. Self-care: attending to personal needs such as going to the bathroom, dressing/undressing, getting a drink of water. Idling: off-task, unfocused, restless or daydreaming activity. Wild/Disorderly: clearly disruptive, unruly, or aggressive activity. No Code: ambiguous, transitional and all other activities or events not clearly codable in terms of the definitions above.

Chapter VI

Quantitative Analysis

This chapter describes the results of the quantitative analyses of our classroom observations in detail. We shall often be comparing and contrasting teachers, classes, and schools, but our purpose in doing this is not to make invidious distinctions but rather to demonstrate how our various research methods work -- how they apply in real life contexts, how they complement each other and what may be their limitations.

As it turned out, the two schools (Inner School and Outer School) and four teachers (Ms. Allen, Prima, Edwards and Ryan) who took part in this research could hardly have been better chosen if we had deliberately set out to find contrasting first grade classrooms. Imagine two dimensions, the first, dimension A, having to do with the academic substance of the curriculum, the regularity of schedules and the efficiency of classroom management, and the second, dimension B, referring to the quality of teacher-child relationships. The major similarities and differences that were revealed in the quantitative analysis of our observation data can then be summarized succinctly in the simple two-by-two table of Figure 1.

Figure 1

A. Academic/Management

		+	-
B. Teacher-child relationships	+	Allen Inner	Edwards Outer
	-	Prima Inner	Ryan Outer

Dimension A distinguishes schools, dimension B cuts across schools. On dimension A which refers to academic input and management efficiency Ms. Allen and Prima, the two teachers in the Inner School, are relatively high, compared to Ms. Edwards and Ryan of the Outer School, whereas on dimension B which refers to the quality of teacher-child interactions Ms. Allen of the Inner School and Ms. Edwards of the Outer School are high compared to Ms. Prima and Ryan.

Dimension A: Academic emphasis and management efficiency.

Schedules. In Ms. Allen's and Prima's classes in the Inner School there clearly was such a thing as a typical day. In fact virtually every day was typical. A set routine was adhered to, activities followed each other smoothly with minimum time spent in transition, and even leisure time was predictably scheduled. Starting at about 9:00 a.m., the first activity observed in both classes was always one in which the whole class was involved, focusing generally on Reading and Language Arts. Ms. Allen and Prima might lead a phonics game ("tell me a word that has the same sound as 'music'"), or pose riddles ("what word beginning with 'ch' is the name of a little red fruit?"), or conduct a writing or spelling drill (two teams compete to spell "at" words). Typically this fast-paced whole class activity lasted a brief 10 to 15 minutes and was immediately followed by the calling up of reading groups, one after the other until lunch at 11 a.m. After lunch the curriculum became more varied. Now we were more likely to see whole-class or small group activities focused on math or penmanship, individual reading, seatwork and paperwork review, and in the last half hour of the day some creative or "fun" activity such as storytelling, making holiday collages, or acting out TV stories.

By contrast, the agenda of activities observed in Ms. Edwards' and Ryan's classes was more irregular, the differences being most marked in Ms. Edwards' room. Reading-related activities usually took place in the morning and math in the afternoon but these were most often conducted on a whole-class or individual basis, and time spent on these activities varied considerably from one visit to another. In general, activities in Ms. Edwards' class were much less crisply demarcated and transition time from one to the other often struck an observer as excessively high. (It should be noted, however, that, at the teacher's request, visits to Ms. Edwards' class did not begin before 10:00 a.m. Thus, the activity schedule constructed from our observations may not be an accurate representation of her typical routine.) Ms. Ryan, the other teacher in the Outer School, also seemed to have a more flexible schedule than the teachers in the Inner School, although not quite so loose as Ms. Edwards'. However, transition periods in Ms. Ryan's class were even longer than in Ms. Edwards' (5 minutes on the average, as long as 11 minutes on one occasion) and Ms. Ryan was also the only teacher to incorporate regular rest periods in her curriculum. Typical daily schedules for the four classes are given in Table 1.

Table 1 about here

Activity contexts. Complementing the information of Table 1 are the data of Table 2 which show more precisely the various activity contexts that were observed and the proportion of time they absorbed.* One salient feature of Table 2 is the difference between the classes in the Inner and Outer Schools in the academic content of their curricula. Ms. Allen and Prima devoted 85% and 90% of their time to teaching reading, writing, math, subject-matter lessons, work recitations, seatwork and paperwork review. In contrast,

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*A complete listing of the frequency of occurrence of each variable included in the SI and UI coding systems and each cluster of variables used in the computer analyses in each classroom is given in Appendix C.

Ms. Edwards and Ryan spent 29% and 48% of their time on reading, 17% and 22% on math, and 82% and 69% overall on academic topics.* Activities with less of an academic focus such as art projects, games, and rest and recreation took up 9% and 10% of their time and morning rituals and transitional activities such as passing out and collecting papers absorbed the remaining 9% to 21%.

Table 2 provides some other intriguing comparisons among the four classes. The two teachers in the Inner School allocated much more of their time to activities involving small groups of 2-7 children than their counterparts in the Outer School (66%, 61% versus 22%, 44%), and correspondingly much less time to activities involving larger groups or the whole class. The reason of course is that the first pair of teachers devoted a large proportion of their time to teaching reading to small, clearly organized reading groups.

One other interesting set of differences is evident in Table 2. This has to do with the length of activities and is the only aspect of scheduling on which the two teachers in the Inner School differ substantially. Activities in Ms. Allen's class typically took no more than 10 minutes, whereas those in Ms. Prima's class lasted 24 minutes, more than twice as long. Both teachers ran very tight ships and activities and groups followed one another smoothly and swiftly like clockwork. But Ms. Allen believed in the short session. By mid-year, the four reading groups in her class were each called twice in a morning for 10 minutes at a time. Each of Ms. Prima's reading groups also met with her everyday, but only once and for twice as much time per session.

Table 2 about here

Interaction topics. The classroom activities and groupings of children that we have discussed so far establish the overall contexts in which interactions between teacher and children take place. In a given activity context some proportion of interactions between teacher and children may be directly concerned with the ostensible activity topic, and some proportion may not. For example, suppose the teacher calls up a reading group. Reading as an activity context might start when the first child is asked to read and end when the last child has his turn and the group is dismissed. Within this context however some proportion of the teacher's interactions with children may have little to do with reading *per se*. She may occasionally engage the children in chitchat, she may spend a fair amount of time explaining procedures (e.g. "Turn to page 3; read the sentence in your head; keep your book flat on the table."), and, almost inevitably, she will make some remarks about behavior ("John, you're not paying attention! Mary, stop that silly giggling!"). In our classroom observations therefore, both the overall activity context and the topic of the teacher's specific interactions with children were recorded. The latter data are presented in Table 3.

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*If Show and Tell activities were excluded from academic activities the figure for Ms. Edwards would be 74%.

Table 3 about here

Comparing the figures for activity contexts in Table 2 and for interaction topics in Table 3, we note three important changes. Time spent on academic subjects has dropped by 15-27%, time absorbed by procedural matters has increased by 7-22% and an important new topic of teacher-child interaction, namely "inappropriate child behavior", now accounts for 5-12% of observed interactions. These changes all reflect the extent to which teachers and children become involved with something other than the actual teaching or learning of the subject implied by the overall activity context as they actually interacted with each other. Again we note substantial differences between the teachers in the Inner and Outer Schools in the proportion of interaction time spent on academic subjects (70%, 65% versus 55%, 46%) and, conversely, on class management (18%, 15% versus 31%, 32%).

The data of Table 3 however is not without surprises. For the first time we see a contrast among teachers that cuts across schools. The variable in question is "inappropriate child behavior" (e.g. disruptiveness, inattentiveness, aggression) which the teacher chooses to call attention to or make an issue of. Now, instead of the familiar Inner versus Outer School dichotomy, we find an interesting new alignment: Ms. Allen of the Inner School and Ms. Edwards of the Outer School versus Ms. Prima and Ryan. The latter pair evidently were much more likely than the former to make a child's inappropriate classroom behavior the focus of their interaction with him (Ms. Allen and Edwards, 6%, 7% versus Ms. Prima and Ryan, 12%, 11%).

Teacher behavior. Finally, we come to the smallest unit of analysis, the specific behavior adopted by the teacher in her interactions with individual children. Table 4 lists behaviors that seem to reflect the teacher's concern with academic matters and her management efficiency. One unambiguous index of this dimension is simply the proportion of total interactions that the observer was able to categorize in terms of the Structured Interaction Coding System, since only those behaviors that had an obvious academic focus and followed clearly structured, well-routinized sequences (question/answer/assessment/evaluation) were accommodated in this coding framework. It comes as no surprise that Table 4 shows a large discrepancy between the Inner and Outer School teachers on this index (59%, 52% versus 37%, 29%). But we also note that even with respect to the less clearly structured and predictable behaviors recorded in the Unstructured Interaction Coding System dissimilarities between the two pairs of teachers are apparent. Most striking is the finding that the number of interactions devoted to explaining and questioning children on procedural matters is about twice as high in the Outer School as in the Inner School (6%, 9% versus 12%, 14%).

Table 4 about here

In sum, regardless of the kind of analysis used, whether we examine schedules, activity contexts, interaction topics, or specific teacher behaviors, it is clear that Ms. Allen and Prima, the two Inner School teachers, emphasized academic affairs and managed their classes more efficiently than Ms. Edwards and Ryan, their counterparts at the Outer School. But, as we shall see, this contrast, which is as much between schools as between these pairs of teachers, does not go much beyond these particular variables. On the second major dimension distinguishing classrooms in this research -- the quality of teacher-child relationships -- differences between schools seem to vanish and a completely new alignment of teachers emerges. This new pattern cuts across schools, linking Ms. Allen and Edwards on one side, and Ms. Prima and Ryan on the other. The specific teacher and child behaviors defining the differences between these pairs are examined in detail in the next section.

Dimension B: Quality of teacher-child relationships.

Teacher behavior. Dimensions of behavior that seem to us to refer to the quality of the teacher's relationship to her pupils are listed in Table 5. The following aspects of teacher behavior, recorded in either the Structured or Unstructured Interaction Coding Systems, are of particular interest: the use of an "open" versus a direct mode of questioning children; the asking of questions allowing "free" responses; positive versus negative reinforcement/evaluation; positive versus negative responses to children's requests; and the teacher's participation in casual conversation, play, or humor with children. These behaviors seem to us to reflect more of a "child-centered" orientation on the part of teachers, greater willingness to give children latitude in responding, and more tolerance and approval of their behavior. Table 5 shows that the trend of results for many of these variables favors Ms. Allen and Edwards. These two teachers are clearly more likely to use an "open" mode of questioning children in which the child was called on only if he had signaled his desire to answer (25%, 17% versus 10%, 8%) and to give positive evaluation of children's responses (17%, 19% versus 7%, 5%). Conversely, they are less likely to reject children's requests (3%, 2% versus 4%, 4%) or to negatively reinforce them. The difference between the two pairs of teachers in the use of negative reinforcement is particularly striking. Ms. Allen and Edwards are much less likely to criticize, restrict, scold and punish their first graders than Ms. Prima and Ryan (15%, 18% versus 34%, 23%).

Table 5 about here

Child behavior. What of the behavior of the children themselves? Table 6 summarizes observed child behavior in terms of four categories: "appropriate behavior" (typified by achievement-oriented behavior such as seeking evaluation of one's performance), "expressive behavior" (e.g. child expresses his opinions, engages in conversation with the teacher), "dependent behavior" (e.g. child requests information, help, permission), and "inappropriate behavior" (e.g. child annoys others, disrupts others at work or is inattentive to his own work).

Again, the pattern of results is unequivocal. Children in Ms. Allen's and Edwards' classes more often engage in appropriate actions (20%, 27% versus 16%, 13%) and expressive behaviors (27%, 26% versus 18%, 18%), and less often exhibit dependent behavior (30%, 27% versus 36%, 40%) and inappropriate actions (23%, 20% versus 30%, 29%) than children in Ms. Prima's and Ryan's classes.

Table 6 about here

One question that may be raised concerning the data of Tables 3-6 is that the percentages of behavior are computed separately for interactions occurring in the Structured Interaction and Unstructured Interaction coding systems. Since there was great variation across classes in the number of interactions coded in terms of the SI and UI, it may be that the findings are distorted by this compartmentalization of the data. Therefore, in Table 7 we present an alternative analysis in which percentages are calculated using the total number of SI and UI interactions combined as the base. The variables listed in Table 7 are composites derived from items occurring in the SI and/or UI and described in Chapter V, Table 1 and in Appendix C.

Table 7 about here

The new findings generally confirm those previously reported. The difference in academic emphasis and management efficiency between the teachers at the Inner and Outer schools is reflected in the higher percentages of product questions for Ms. Allen and Prima (54%, 42% versus 30%, 25%) and the lower percentages of behavior concerned with procedure (3%, 5% versus 9%, 12%). Similarly, the difference between Ms. Allen and Edwards and the other two teachers in the quality of teacher-child relationships is demonstrated on several variables. The first two teachers provide more positive reinforcement (13%, 11% versus 7%, 4%) and more frequently ask open and free questions (16%, 8% versus 6%, 3%) and conversely, they are conspicuously less likely to criticise and scold children (8%, 13% versus 19%, 19%). Correspondingly, children in their classes exhibit less dependent behavior (4%, 7% versus 9%, 14%) and inappropriate behavior (3%, 5% versus 8%, 10%) than in the other two classes.

The main difference between the present findings and the previous ones is in the low percentages of appropriate and expressive child behavior in Ms. Allen's class. In Table 6 Ms. Allen's and Edwards' classes rank highest on these variables, whereas in Table 7 Ms. Allen's class ranks lowest. The explanation is obvious. It is that the combined frequency of the four types of child behavior being considered is low in Ms. Allen's class, indeed, only about half as high as in the other classes. This fact makes the analysis of Table 7 much less appropriate for this teacher than that of Table 6 where class variations in the total number of child behaviors is taken into account.

Individuation. The concept of individuation refers to the teacher's interest in perceiving individual differences, individual changes and individual needs in children and to her ability to act appropriately regarding these differences. There is an obvious conceptual affinity between this idea and the interpersonal behaviors that we have just discussed. However, the concept of individuation requires two other types of data in addition to the recording of teacher-child interactions: information on the teacher's perceptions of the needs and characteristics of individual children and data on the correspondence between these perceptions and the "objective" characteristics of the children in question. In this study these data were obtained from interviews with teachers and from observations specifically focused on individual children in contexts in which the teacher's influence was less likely to be dominant than in our teacher-focused observations. These findings will not be discussed here since they lend themselves most appropriately to the case study approach adopted in the second half of this book.[*] Instead what we shall do is to examine certain quantitative aspects of individuation that are apparent in the teacher-focused observations and which seem to be associated also with the dimension of "positive teacher-child relationships".

Variation in teacher behavior toward individual children. The main analysis centers on the degree or pattern of variation in the teacher's behavior toward individual children. Do the quantity and quality of her interactions with individuals vary greatly? Do some children receive much more than their "fair share" of her attention and some children far less? If so, in what ways is her treatment of these children different from that encountered by the average child? Which teacher is likely to show more variation in her treatment of children, the one whose behavior is characteristically more positive or more negative?

Table 8 shows the degree of variation in quantity and quality of interactions with their teacher that individual children experienced in each class. In these analyses the data for each variable are computed as a percentage of each child's total number of interactions with his teacher. A profile displaying different types of teacher and child behavior is thus generated for each child. This procedure controls for the wide variation across children in quantity of teacher-child interaction which may be affected by situational factors such as absences from school and also by characteristics of the teacher and child. Table 8 presents the mean, the lowest and highest percentages, and the number of children whose percentages are more than twice or less than half the average for each variable.

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[*] Case studies of the four teachers are now in preparation.

Table 8 about here

Clearly, the quantity and quality of teacher-child interaction varies greatly in the four classes. Consider first the range in the sheer quantity of encounters. In Ms. Allen's class one child receives 8.8% of all interactions, another receives 3.3%. The highest and lowest percentages in the other three classes are: Ms. Prima, 8.9% and 3.0%; Ms. Edwards, 11.7% and 5.3%; Ms. Ryan, 9.1% and 2.2%. The quality of teacher-child transactions also varies dramatically from child to child. On many variables the highest percentage is several times larger than the lowest and often enough the percentages for several children are more than twice or less than half the figure for the average child. To cite two specific examples: positive reinforcement ranges from 3.8% to 25.9% for the children at the two extremes in Ms. Allen's class, from 3.1% to 12.0% in Ms. Prima's, from 6.6% to 17.6% in Ms. Edwards', and from 0% to 8.2% in Ms. Ryan's. Conversely, negative teacher reinforcement oscillates between 0% and 12.5% in Ms. Allen's class, between 3.7% and 33.3% in Ms. Prima's, between 6.5% and 26.8% in Ms. Edwards', and between 2.2% and 40.9% in Ms. Ryan's. If these findings are representative of individual children's entire experience in a classroom, then some children may receive no positive or no negative reinforcement at all while others may experience such reinforcement in a quarter, two-thirds, or even two-fifths of their interchanges with the teacher. These data underscore the folly of describing classroom experiences solely in terms of averages, as if teachers and students behave uniformly. In fact striking variation rather than standardization may be typical. It should be noted that this differentiation applies to the behavior of students no less than teachers. Inappropriate child behavior for example ranged from 0% in all classes to a maximum of 6.3% in Ms. Allen's class, 14.7% in Ms. Prima's, 10.6% in Ms. Edwards', and 24.0% in Ms. Ryan's.

Children receiving exceptional amounts of attention. In Table 9 we focus on those children who received a great deal more or less than the average share of attention from their teachers. Here we use a simple index, namely the number of children in each class who received 50% more or less than the number of interactions due to the average child if the teacher's attention were equally distributed among all pupils. The outstanding result is the difference between Ms. Allen and Edwards on the one hand, and Ms. Prima and Ryan on the other. In the first two classes far fewer children received exceptional amounts of attention than in the last two classrooms (Ms. Allen and Edwards, 1 and 2 children versus Ms. Prima and Ryan, 6 and 5). This finding suggests that the more child-centered and positive the teacher's behavior toward children in general, the less likely she is to discriminate among them in the sense of giving very much more or less attention to some than to others.

Table 9 about here

What now of the quality of the teacher's interactions with these exceptional children? Are they likely to attract a particular kind of attention from her? To answer this question we have plotted in Table 9 profiles of teacher and child behavior for the nine children who received a disproportionately high amount of attention in the four classes. To construct these profiles each type of behavior was computed as a percentage of the individual child's total interactions with his teacher and the percentage compared to the corresponding figure for the average child. Table 9 includes all variables on which profiles for at least two children who received high amounts of attention deviated by 50% or more from that of the average child. Two patterns are clearly evident. The first pattern characterizes children who display proportionately higher than average levels of inappropriate behavior. This kind of behavior becomes an issue with the teacher and consequently the child receives more than an average share of negative reinforcement. The second pattern applies to children who exhibit relatively high levels of dependent behavior. These children frequently ask the teacher for help and information and have their requests rejected more often than average. Two inferences can be drawn from these findings: first, that children who obtain excessive amounts of attention overall from the teacher receive disproportionately more negative attention, and second that their actual behavior seems superficially to warrant this kind of disapproving reaction on the teacher's part. Although all "high attention" children in the four classes tend to fall into one or the other of these two categories it is interesting to note how the two patterns are modulated in Ms. Allen's and Edwards' cases. Of the nine children, only two, Simone in Ms. Allen's class and Daniel in Ms. Edwards' also enjoyed more than an average amount of light-hearted conversation, play and humor with their teachers. In their cases the teacher's frequent negative reactions to their behavior seem to be softened and modulated by friendly, easy-going exchanges that indicate acceptance and indeed even delight in these two children.

Reading groups. The rapidity with which the teacher forms reading groups, the criteria she uses in assigning children to them, the degree of movement she permits from one to the other, the way she composes, perceives and ranks them, are all factors that are likely to be related to the dimension of interpersonal behavior that we have been discussing.

An examination of the pertinent information collected in this study shows the now-familiar pattern with Ms. Allen and Edwards linked on one side and Ms. Prima and Ryan juxtaposed on the other. For example, although all four teachers reportedly relied primarily on personal observations of the individual child's reading skill in making assignments to reading groups, Ms. Allen and Edwards apparently gave more serious consideration to personality and motivational factors in making these decisions. Both teachers regarded reading groups as important contexts for socio-emotional as well as academic development and spoke of deliberately teaming the shy and the confident, the more and less skilled, so that the latter could inspire and help the former. They both worried about the effects of relegating children to meritocratic structures defined solely by academic skill, but the solutions they adopted were rather different. Ms. Edwards' strategy was simply not to use reading groups very much, and when she did, to form one large group of 10-11 children of mixed ability plus two other small groups of 2-3 much more or much less advanced children. With most children placed in a large, heterogeneous, intermediate group, Ms. Edwards was less pressed to promote or demote individuals and in fact, after the first few weeks of school, no children changed groups in her class. Ms. Allen adopted virtually the opposite tactic. She was by far the most flexible of the four teachers in permitting children to move from one reading group to another. Thus by the end of the second quarter of the school year, 7 of 22 children in Ms. Allen's class had either been promoted to or read frequently with a higher reading group in addition to their core group, and only one child had been demoted. By contrast, after a brief experimentation period, all children in Ms. Prima's class kept their initial placements and moved neither up nor down. Similarly only two children in Ms. Ryan's class changed assignments, both moving down to a lower group. Ms. Allen was also the only teacher who did not entirely relegate to a separate reading group those children in her class who received remedial tutoring from the school specialist. In the other three classes these children formed the bottom ability group and read only with each other. In Ms. Allen's class there was such a "specialist" group which met separately but the children in it were also regularly invited to read with other groups composed of "ordinary" children who had not been singled out for remedial help. Ms. Allen vigorously opposed the automatic use of specialists for children having reading difficulties, arguing that the harm inflicted on the child by being cut off from his classmates, labeled, and made to feel different more often than not outweighed the benefits of special tutoring. Unsuccessful in her efforts to have the four "specialist" children in her class mainstreamed, she went out of her way to include them in as wide a cross-section as possible of the reading activities going on in her classroom.

Seating patterns. Like reading groups, classroom seating patterns often reflect the teacher's basic attitudes toward children. Two aspects of seating arrangements struck us as important: the frequency with which desks are rearranged and the use of isolation as a technique for controlling disruptive or distractible children. On the first variable, Ms. Allen again stands out. In her classroom not only was there no typical seating arrangement, in fact desks were rearranged and most children had different neighbors on every one of our visits. Clearly, as with her reading groups, these changes were made by design, not happenstance. Thus Ms. Allen deliberately used large groupings of 6-10 adjoining desks as well as smaller ones and changed these so frequently that the average child in her class of 22 could become acquainted with as many as 11 or 12 different "desk neighbors". In contrast with Ms. Allen, the other three teachers tended to settle on fixed arrangements after a short period of experimentation in the first few months of school. These teachers also favored small groupings of 2-4 children so that most children encountered the same few neighbors most days, or an average of 6 to 7 different neighbors over the course of the year.

Discrimination. We have found that the four teachers differed substantially in the emphasis they gave to academic matters, the efficiency with which they ran their classrooms and their attitudes and behavior toward their students. In substantiating these conclusions, we have concentrated for the most part on the teacher's typical behavior as indicated by her treatment of the average child. But because the data we have gathered records the teacher's interactions with individual children, it is also eminently suitable to answering another kind of question which so far we have hardly broached. Given that the four teachers differed from each other in their typical patterns of behavior, did they vary also in their treatment of children of different races and sexes? In the section on individuation we noted that one pair of teachers, Ms. Prima and Ryan, were more likely than the other to treat individual children very differently from others. Were these two teachers also more likely to discriminate between blacks and whites and boys and girls?

To answer these questions two sets of data were constructed and analyzed.

First, each child's interactions with his teacher were isolated in the teacher-focussed classroom observations, then profiles of teacher and child behavior were computed for each individual and averaged for children of a given race and sex. The assumption guiding this analysis was that if boys and girls and black and white children behaved similarly and were treated similarly, then no significant differences should be found in these profiles when scores for individuals are averaged. The second set of data concerned the composition of reading groups and seating patterns in the classroom. Again, our assumption was that if groups were equitably treated, there should be no evidence of systematic differences in these assignments. Specifically, the proportion of blacks and whites and of boys and girls in higher and lower reading groups should correspond to their proportions in the class, and similarly with respect to favored and less favored seating arrangements.

Race and sex differences. Table 10 shows the average proportion of various types of behavior received or emitted by black and white girls and boys within each of the four classes. In the statistical analysis an arc sine transformation was applied to the proportions and the between-group differences tested by means of analysis of variance. In the following discussion only those differences between race and sex groups that reached or approached the $p \leqq .05$ level of significance will be considered. Significant statistical interactions between race and sex are indicated in Table 8 but these will not be interpreted because the small number of children in the data cells made any conclusions as to interactions between these two factors highly dubious.

Table 10 about here

The most compelling feature of the results is the lack of significant differences either for race or sex groups except in one class, Ms. Prima's. In the other three classes there are few differences either in the behavior of children of different races and sexes or in the behavior of teachers toward them. Let us examine these results for each of the four classes briefly.

Ms. Allen. Of the 20 variables analyzed only one difference in teacher behavior was found for race and none for sex groups. Ms. Allen more often positively reinforced black children but this may well be explained by the concomitant finding that black children in her class behaved more appropriately than whites.

Ms. Edwards. There were no differences that were clearly a function solely of race in Ms. Edwards' class and only one notable difference between the sexes, namely, boys were more likely to engage in inappropriate behavior than girls.

Ms. Ryan. There were two significant differences for race groups in Ms. Ryan's class but these went in opposite directions. Ms. Ryan more often failed to give academic feedback to white than to black children, but she more frequently engaged in academic activities with whites than with blacks.

Ms. Prima. Only in Ms. Prima's class was there an unequivocal pattern of differences in the teacher's treatment of black and white children. But the pattern is not the one that many readers might suppose. In every case it is black children who were favored over whites. Specifically Ms. Prima provided more positive reinforcement to black children and more positive responses to their requests. She more frequently asked them "open" questions, more often gave them feedback on their accomplishments, and more often engaged with them in conversational, playful, or humorous interchanges and in non-academic activities. Correspondingly, black children in Ms. Prima's class were more likely than whites to come to Ms. Prima with requests for information and help.

One might characterize Ms. Prima's differential treatment of black and white children in her class by saying that, in general, her relationship with black children was more positive and child centered than with white children. Although overall her style of interaction with children was less positive and child centered than was the case for Ms. Allen and Edwards, this difference was less marked with respect to the blacks in her class. Possible reasons for these findings are discussed in case studies of the teachers now being prepared.

Reading groups. The race and sex composition of reading groups at the end of the second quarter of the school year (when our teacher-focused classroom observations ended) are given in Table 11. As was true for the behavior observation data, there seems to be little evidence of race or sex discrimination in three of the four classes. The exception is Ms. Ryan's classroom at the Outer School which stands out in terms of the preponderance of whites and girls in her top reading group. Although 29% of the children in her class were black and 33% were boys, no black children and only one boy was included in the seven children belonging to her top reading group. Conversely, of the seven children in her bottom reading groups four were black and four were boys. In contrast, the distribution of blacks and whites and boys and girls in the reading groups in the other three classes was much more in keeping with their representation in the classrooms as a whole. In fact in Ms. Prima's and Edwards' classes, the race and sex breakdown of each reading group almost precisely paralleled their overall class distribution.

Table 11 about here

Table 12 about here

Seating patterns. Table 12 shows no evidence of racial differences in the use of isolation, defined as the seating of a child apart from his classmates for at least one third of our observations. The same, however, cannot be said for sex discrimination. All eight children isolated in the four classes were boys!

Seating patterns were also examined for evidence of race or sex segregation. The question here was whether, say, white children were more likely to be seated next to whites, or boys next to boys, thus limiting their opportunities to become acquainted with children of a different race or sex. For this analysis we first counted the number of neighbors each child had during our observations, noting the race and sex of each child and of his neighbors (where neighbor is defined as a child seated at a desk adjoining the focus child's). For each child the proportion of black and white neighbors and male and female neighbors was then computed and averaged for children of the two race and sex groups. These proportions were then compared to the corresponding proportions of black and white and male and female neighbors in the class as a whole, the assumption being that if there was no systematic bias in seating patterns then the proportions for each subgroup should roughly parallel the overall proportions for the class. The results of this analysis are shown in Table 12.

Table 12 shows no evidence of segregation in seating patterns. Rather there is considerable evidence of deliberate attempts by teachers to "integrate" their classes across race and sex. Thus, in the two classes, Ms. Prima's and Edwards', in which the proportions of black and white neighbors for race subgroups diverge conspicuously from the proportions for the class as a whole, the bias is in the direction of "overcompensation". For example in Ms. Edwards' room, the proportions of white and black neighbors in the class as a whole were 51% and 49%. On the average, however, 58% of neighbors for white children in her class were black, and 63% of neighbors for black children in her class were white. This teacher thus seems to have gone out of her way to ensure that children of different races had opportunities to come to know each other as seat neighbors. Overcompensation in seat assignments is even more apparent in Table 12 with respect to sex. In each of the four classes girls had a lower proportion of female neighbors than theoretically expected and vice versa for boys.

Exceptional treatment of individuals. In our discussion of individuation we noted that 14 children in the four classes were given either exceptionally high or low amounts of attention by the teacher and that 11 of these 14 children were either in Ms. Prima's or Ms. Ryan's class. We also noted that the behavior profiles of the "high attention" children indicated one of two patterns -- a high level of inappropriate child behavior accompanied by high levels of negative teacher reinforcement, or a high level of dependent child behavior accompanied by a high level of teacher rejection of the child's requests. We note that four of the five children whose profiles indicated the "inappropriate behavior" pattern were boys and all were black, whereas all four of those showing the "dependent" pattern were girls and only one was black.

Summary. The quantitative analysis described in this chapter focused at first on two dimensions which clearly seem to distinguish the four teachers participating in this research. The first dimension refers to the academic substance of the curriculum, the regularity of schedules and the efficiency of classroom management. On this dimension the two teachers in the Inner School, Ms. Allen and Prima, contrasted strongly with the two teachers of the Outer School. They adhered to more regular schedules and devoted much more class time to teaching children in small organized groups, and substantially less time to procedural matters. The second dimension refers to the quality of interpersonal behavior. Here differences among teachers cut across schools, with Ms. Allen of the Inner School and Ms. Edwards of the Outer School aligned on one side, and Ms. Prima and Ryan on the other. The first pair of teachers gave children more scope to express themselves, were more responsive to children's requests, and more approving and less critical of their performance and behavior. Concomitantly, the children in these two classes more often engaged in appropriate and self-expressive behaviors and less often displayed dependent and inappropriate behaviors than their counterparts in the other two classes. These contrasts in interpersonal behavior were also related to differences in the structure of reading groups and seating patterns in the four classes, with Ms. Allen and Edwards showing relatively more interest in socio-emotional considerations and more flexibility in their arrangement of groups and seating patterns than Ms. Prima and Ryan.

In the final part of this chapter we considered the issue of racial and sex discrimination in the four classes. No consistent evidence of differential treatment of blacks and whites or boys and girls was found although one teacher, Ms. Prima, clearly favored black children in her day-to-day interactions, and another, Ms. Ryan, seemed to favor whites and girls in the structuring of her reading groups. These results were not unexpected in view of the fact that the teachers had agreed to have their classrooms scrutinized by minority researchers. Nevertheless the lack of evidence of racial or sex discrimination in the very detailed, longitudinal data gathered in this research is a testimony to these four teachers.

Table 1 Typical Daily Teacher Schedules

TEACHER	MORNING		LUNCH	AFTERNOON	
Allen	9:00-9:15 9:15-11:00	Whole class Language Arts and reading Reading groups, one after the other. Groups often met twice in this period. Occasional 5-minute subject matter lesson or class game (e.g. "Freeze").		11:30-12:00 12:00-2:00 2:00-end	After lunch "choosing" and play Whole class activities including math, penmanship, paperwork review. Also individual help, math groups, class fun activity (e.g. singing). Activities lasted 5-15 minutes each. "Choosing"
Prima	9:00-9:20 9:20-11:00	Reading and Language Arts class activity, game or drill Reading groups, approximately ½ hour each, in order from low to high rank. After groups finished, children worked on papers, T gave individual reading help.		11:30-12:00 12:00-12:45 12:50-1:00 1:00-1:30 1:30-1:40 1:40-2:15	After lunch - not observed Whole class math lesson Penmanship Library, gym - not observed Math paperwork Class activity: word riddles, collages, TV story
Edwards	9:00-10:00 10:00-11:00	Not observed Reading groups, class paperwork and review, penmanship practice, reading and language instruction, individual help, transition periods (e.g. story time, cleanup).		11:50-12:40 12:40-1:00 1:00-2:25	Paperwork, whole class math, math paperwork (sometimes until 1:00) Show and Tell, "Weekly Reader", TV story Whole class math, smaller group math, math paperwork. Late afternoon fun activities (making calendars, life-size paper dolls).
Ryan	8:30-9:00 9:00-11:00	Morning routine, free play, and transition Reading groups, whole class reading and paperwork, seatwork. Reading groups often met twice. Occasional Show and Tell, library period.		11:50-12:10 12:10-1:00 or 12:[illegible]-1:30 1:15-2:20	Rest period after lunch, sometimes followed by story time. Whole class math lesson (35-45 minutes), math group, math papers. Occasional long rest period, fun activity (making paper leaves). Class math, math paper, math group while others play. T reads to class, plays word games.

Table 2

Activity Contexts[a]

	Teachers			
Activity Context	Allen	Prima	Edwards	Ryan
Subject Matter Lesson	0.0	0.0	2.3	1.7
Reading/Phonics	75.3	77.3	28.7	47.5
Math	6.6	4.5	17.2	11.9
Penmanship	1.0	2.3	2.3	0.0
Other Academic	0.0	0.0	4.6	1.7
Seatwork, Paperwork Review	2.0	5.7	18.4	5.1
Self-reference Recitation	0.0	0.0	8.0	0.8
All Academic	84.8	89.8	81.6	68.6
Non-Academic	3.5	3.4	9.1	5.9
Rest and Recreation	0.5	0.0	0.0	4.2
Transitions	11.1	6.8	9.2	11.9
Morning Routine[b]	0.0	0.0	0.0	9.3
Number of Children Involved				
1	5.1	2.3	4.6	0.0
2-7[c]	65.6	61.3	21.8	44.1
> 7	29.3	36.4	73.6	56.9
Median	6.1	6.6	12.9	17.8
Subgroup Rank				
1 (Top)	15.7	22.7	0.0	11.9
2	19.7	20.5	10.3	19.5
3	15.2	20.5	11.5	12.7
4	11.1	--	--	--
No Rank	38.4	36.4	78.2	55.9
Mean Activity Length (minutes)	9.8	24.0	19.8	15.5
Total Activity Contexts (n)	198	88	87	118
Total Observations (n)	11	11	11	10

[a] Entries are percentages of total activity contexts coded in the SI and

UI observation systems.

[b] Except in the case of Ms. Ryan, observations were not made during the first half hour of the day (8:30-9:00 a.m.) when morning routine activities typically occurred.

[c] Organized reading groups in the four classes nearly always had between 2 and 7 members, and nearly all interactions involving 2-7 children occurred in the context of reading. Math or other academic subjects usually involved a larger group or the whole class.

Table 3

Interaction Topics[a]

Topics	Allen	Prima	Edwards	Ryan
	Teachers			
Academic	69.6	65.3	54.6	45.6
Non-Academic	3.8	4.7	3.7	5.8
Procedure	18.4	15.3	31.3	32.2
Privilege	1.5	1.4	2.8	4.3
Appropriate Child Behavior	0.3	0.5	0.3	0.2
Inappropriate Child Behavior	5.5	12.1	6.7	11.2
Health, Distress	0.9	0.7	0.6	0.8

[a] Entries are percentages of dyadic interactions coded in either the SI or UI that were concerned with the topic listed on the left of the table.

Table 4

Teacher Behavior: Academic Emphasis and Management Efficiency

I. Structured Interaction Coding System[a]

Teacher Behavior	Teachers Allen	Prima	Edwards	Ryan
T assesses child's response	46.9	62.0	74.0	57.2
T sustains child's response	25.0	19.1	27.7	23.5

II. Unstructured Interaction Coding System[a]

Teacher Behavior	Teachers Allen	Prima	Edwards	Ryan
T informs/questions:				
Academic matters	11.4	12.0	13.9	12.7
Procedural matters	6.2	8.8	12.3	13.9
Total T behaviors[b]	1,234	1,654	1,552	1,813

III. Interaction Type and Rate

T-C Interactions	Teachers Allen	Prima	Edwards	Ryan
SI (frequency)	1,405	1,488	725	560
UI (frequency)[c]	1,159	1,550	1,437	1,693
SI/SI + UI (%)	54.8	49.0	33.5	24.9
Total coded observation time (minutes)[d]	514.0	557.0	473.0	548.5
$\bar{X}$ interactions per minute	5.0	5.5	4.6	4.1

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[a] Entries are percentages of dyadic interactions coded in the SI (part I) or of teacher behaviors in the UI (part II) in which the behavior specified on the left of the table occurred.

[b] Total number of teacher behaviors coded in the UI variable clusters de-

fined in Appendix C-II. The UI differs from the SI in that varying numbers and types of teacher and child behaviors may be coded for an interaction depending on what occurs in the teacher-child interchange. The most appropriate data base therefore is the total number of teacher or child behaviors that were recorded, rather than the total number of interactions. In the SI the dimensions of teacher and child behavior are preset and a code must be recorded for each dimension for each interaction unit. Hence the data base for the SI is always the total number of SI interactions recorded in the class.

[c] All coded UI interactions including those in which the recipient of the interaction was a group or the whole class (see Appendix C-III for frequencies). UI interactions addressed to a group of more than 3 children are included in the analyses of Tables 4, 5, and 6 where SI and UI interactions are treated separately but are omitted from all combined SU+UI analyses (all other tables). Interactions addressed to 2 or 3 children were coded as if addressed to each child individually and counted as dyadic interactions.

[d] Refers to the amount of time spent actually observing the teacher's behavior. Thirty seconds of each minute the observer was working in the classroom was spent observing behavior and thirty seconds was spent coding or describing it.

Table 5

Quality of Teacher-Child Relationships

I. Structured Interaction Coding System[a]

Teacher Behavior		Teachers Allen	 Prima	 Edwards	 Ryan
Question/demand mode:	open	24.7	10.1	17.2	8.0
	direct	74.1	86.3	74.2	86.4
	other	1.2	3.6	8.4	5.5
Question/demand type:	free	4.3	0.5	5.7	4.3
	process	4.9	18.7	11.7	6.3
	product	90.8	80.6	82.5	89.5
Evaluation:	positive	16.9	7.1	19.2	5.0
	negative/mixed	0.4	0.6	0.4	0.0

II. Unstructured Interaction Coding System[a]

Teacher Behavior		Teachers Allen	 Prima	 Edwards	 Ryan
Reinforcement:	positive	5.5	6.5	5.2	3.5
	negative	15.4	33.5	17.5	22.6
Response to child request:	grants	12.6	9.1	9.3	9.8
	rejects	2.7	4.1	2.4	3.7
Converses, plays, jokes		7.2	7.0	5.3	3.7
Total T behavior[b]		1,234	1,654	1,552	1,813

[a] Entries are percentages of dyadic interactions coded in the SI (part I) or of teacher behaviors in the UI (part II) in which the behavior specified on the left of the table occurred.

[b] Total numbers of teacher behaviors coded in the UI variable clusters defined in Appendix C-II.

Table 6

Child Behaviors

Unstructured Interaction Coding System[a]

Child Behaviors	Teachers Allen	 Prima	 Edwards	 Ryan
Appropriate	19.7	16.4	27.1	13.2
Expressive	27.2	17.5	26.3	18.0
Dependent	30.0	35.7	26.7	39.8
Inappropriate	23.1	30.3	19.9	29.0
Total child behaviors[b]	320	736	532	711

[a] Entries are percentages of total child behaviors coded in the UI in which the behaviors specified on the left of the table occurred.

[b] Total number of child behaviors coded in the UI variable clusters defined in Appendix C-II.

Table 7

Teacher and Child Behavior: Composite Variables[a]

Variable[b]	Allen	Prima	Edwards	Ryan
	Teachers			
Appropriate C behavior	2.6	4.2	7.3	4.7
Positive T reinforcement	12.8	7.1	11.0	4.3
Expressive C behavior	3.6	4.3	7.1	6.4
T humor, conversation	3.4	3.9	4.0	3.1
T asks open/free question	16.4	5.5	8.2	2.9
Dependent C behavior	4.0	9.1	7.3	14.2
T grants request	6.0	4.9	7.3	8.8
T rejects request	1.4	2.3	2.0	3.3
Inappropriate C behavior	3.1	7.6	5.4	10.4
Negative T reinforcement	7.8	18.8	13.4	19.0
T asks process question	3.1	10.1	4.8	2.5
T asks product question	53.5	41.6	30.3	25.4
T does not assess C's response	27.1	14.9	7.0	10.0
T assesses C's response	31.7	36.7	34.9	22.5
T gives directive	63.1	54.5	50.1	46.3
T procedural behavior	3.0	4.8	8.6	11.9
Total interactions (n)[c]	2,384	2,891	1,974	1,974

[a] Entries are percentages of total interactions in which the behaviors specified on the left of the table occurred.

[b] The items composing these variables are derived from the SI and/or UI coding systems as described in Chapter 5, Table 2 and in Appendix C.

[c] Sum of SI interactions and UI interactions between the teacher and an individual child. See Table 4, footnote c.

Table 8a

Individual Variation in Children's Interactions with Teachers[a]

Variable	Allen[b]					Prima				
	$\bar{X}$	Min.	Max.	L	H	$\bar{X}$	Min.	Max.	L	H
Topics: Academic	69.8	58.7	81.2	0	0	66.9	48.4	89.0	0	0
Non-academic	3.8	0	11.0	5	2	4.4	0	8.7	3	0
T procedure	18.3	11.8	28.6	0	0	15.0	5.5	28.9	1	0
Privilege	1.5	0	4.5	9	4	1.5	0	3.8	7	3
Approp. C beh.	0.2	0	1.0	17	5	0.4	0	2.1	9	3
Inapprop. C beh.	5.4	0	9.6	4	0	11.2	1.8	23.3	3	1
Health, distress	1.0	0	3.1	10	5	0.5	0	2.6	11	4
Appropriate C behavior	2.4	0	5.3	16	3	3.9	0	7.7	4	0
Positive T reinforcemt.	13.0	3.8	25.9	2	0	7.0	3.1	12.0	2	0
Expressive C behavior	3.5	0	8.7	7	3	4.0	0	8.0	5	0
T humor, conversation	3.3	0	9.8	7	3	3.6	0	9.3	3	1
T open/free question	17.5	2.6	29.5	5	0	5.6	0.6	12.1	4	2
Dependent C behavior	3.7	0	8.6	5	1	8.8	1.0	15.3	3	0
T grants request	6.2	1.8	11.5	2	0	4.6	1.0	11.3	4	1
T rejects request	1.1	0	5.1	11	5	2.2	0	5.5	3	2
Inappropriate C behav.	2.9	0	6.3	6	2	6.9	0	14.7	6	2
Negative T reinforcemt.	7.3	0	12.5	5	0	17.6	3.7	33.3	4	0
T process question	3.1	0	7.1	7	3	10.2	5.7	19.4	0	0
T product question	54.2	38.5	66.3	0	0	43.6	27.9	64.9	0	0
T does not assess resp.	27.5	19.1	41.9	0	0	16.3	6.2	32.2	2	0
T assesses response	31.9	19.3	44.7	0	0	37.2	18.4	51.4	1	0
T gives directive	63.2	49.6	79.5	0	0	56.8	39.0	77.2	0	0
T procedural behavior	2.8	0	5.5	4	0	4.9	1.7	9.0	4	0
Total interactions	5.0	3.3	8.8	0	1	5.4	3.0	8.9	4	2
n (all Cs)			22					20		

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[a] See Table 8b for footnote.

[b] See Table 8b for footnote.

Table 8b

Individual Variation in Children's Interactions with Teachers[a]

Variable	Edwards[b]					Ryan				
	$\bar{X}$	Min.	Max.	L	H	$\bar{X}$	Min.	Max.	L	H
Topics: Academic	53.7	41.9	64.0	0	0	44.9	27.0	82.1	0	0
Non-academic	3.8	0.7	7.6	4	0	5.7	1.1	10.3	4	0
T procedure	32.2	25.8	43.6	0	0	30.6	7.7	42.0	3	0
Privilege	3.2	0	9.7	3	1	4.7	1.0	16.3	3	1
Approp. C beh.	0.2	0	1.9	13	4	0.04	0	0.9	18	3
Inapprop. C beh.	6.2	0	12.2	3	0	10.3	0	25.2	5	2
Health, distress	0.6	0	3.0	9	3	0.6	0	3.4	12	4
Appropriate C behavior	7.4	3.6	11.8	0	0	4.2	0	7.3	4	0
Positive T reinforcemt.	11.3	6.6	17.6	0	0	4.0	0	8.2	3	1
Expressive C behavior	7.1	2.8	12.3	2	0	6.2	1.3	13.4	1	1
T humor, conversation	4.1	1.4	10.6	2	1	3.0	0	6.8	4	2
T open/free question	8.3	3.1	14.6	5	0	3.2	0	8.0	4	2
Dependent C behavior	7.3	2.6	14.3	1	0	12.6	0	23.3	4	0
T grants request	7.9	3.4	17.3	2	2	8.4	0	17.3	4	1
T rejects request	2.0	0	8.0	6	3	2.7	0	7.4	7	3
Inappropriate C behav.	5.1	0	10.6	3	2	9.4	0	24.0	4	2
Negative T reinforcemt.	12.8	6.5	26.8	0	1	16.9	2.2	40.9	6	3
T process question	4.5	0	11.8	7	2	2.5	0	6.7	6	2
T product question	29.3	19.1	42.4	0	0	29.6	3.1	78.6	2	1
T does not assess resp.	6.5	0	11.0	3	0	11.9	0.6	23.2	5	0
T assesses response	34.2	22.7	41.9	0	0	24.4	8.8	53.6	1	1
T gives directive	50.6	37.5	62.4	0	0	50.4	25.8	83.9	0	0
T procedural behavior	8.5	3.2	15.5	1	0	11.2	1.8	19.0	4	0
Total interactions	7.3	5.3	11.7	0	2	5.0	2.2	9.1	1	4
n (all Cs)			17				21			

[a] Unless otherwise noted, entries are percentages of all interactions between the

teacher and an individual child in which the behavior specified on the left of the table occurred.

[b] Min. refers to lowest percentage; Max. refers to highest percentage; L refers to the number of children whose percentage was less than half the mean; H refers to the number of children whose percentage was more than twice the mean.

Table 9

Profiles of Behavior for High Attention Children

Number of Children	Allen	Prima	Edwards	Ryan
High attention	1	2	2	4
Low attention	0	4	0	1

Behavior Profiles (Interaction with Teacher)

	Inappropriate			Dependent		Expressive	
Class	Topic: Inapprop. C Behav.	Inapprop. C Behav.	Neg. T Reinf.	C Depend. Behavior	T Rejects Requests	C Comments	T Humor, Play, Talk
Allen							
Simone	5.7	4.3	9.0	7.1*	3.8*	7.1*	6.7*
Average C	5.4	2.9	7.3	3.7	1.1	3.5	3.3
Prima							
Dennis	18.4*	11.7*	28.5*	13.3	2.0	3.9	3.5
Charles	23.3*	14.7*	33.3*	7.8	3.1	3.9	3.1
Average C	11.2	6.9	17.6	8.8	2.2	4.0	3.6
Edwards							
Judy	10.7*	5.4	26.8*	14.3*	8.0*	6.3	2.7
Daniel	10.3*	6.7	18.5	6.7	1.0	12.3*	6.7*
Average C	6.2	5.1	12.8	7.3	2.0	7.1	4.1
Ryan							
Lydia	8.4	10.7	18.3	19.8	5.3*	8.4	3.8
Madeline	8.0	10.8	17.0	20.5	7.4*	5.1	3.4
Vanessa	16.2	16.2*	34.6*	10.6	2.8	8.4	3.9
Kenneth	25.2*	23.3*	40.9*	13.2	6.3*	5.7	4.4
Average C	10.3	9.4	16.9	12.6	2.7	6.2	3.0

*Indicates variables for which high attention child had 50% more interactions than the average child in his or her class.

Table 10

Race and Sex Differences[a]

Variable[b]	Allen				Prima				Edwards				Ryan				Effect[c]		
	BG	BB	WG	WB	BG	BB	WG	WB	BG	BB	WG	WB	BG	BB	WG	WB	Race	Sex	RXS
Topics: Academic	.25	.22	.21	.21	.25	.27	.24	.22	.27	.27	.25	.30	.22	.22	.22	.25	R^{**}		
Non-academic	.23	.16	.16	.27	.25	.35	.21	.19	.28	.28	.26	.29	.27	.21	.21	.19	P^{**}		A^{**}
T procedure	.22	.24	.21	.22	.21	.32	.27	.21	.27	.28	.26	.29	.21	.24	.21	.22			P^{**}
Inapprop. C beh.	.23	.21	.17	.24	.19	.36	.26	.21	.23	.28	.21	.34	.18	.25	.16	.26			P^{**}
Appropriate C beh.	.26	.23	.12	.18	.23	.30	.19	.20	.20	.28	.26	.30	.24	.22	.17	.25	A^{*}		
Positive T rein.	.25	.24	.18	.21	.26	.30	.19	.21	.25	.28	.26	.28	.23	.20	.21	.19	$A^{**}P^{**}$		
Expressive C beh.	.20	.20	.17	.23	.24	.33	.30	.18	.29	.26	.28	.24	.25	.20	.21	.21			
T humor, convers.	.20	.17	.18	.25	.29	.32	.21	.18	.27	.25	.30	.23	.26	.13	.21	.16	P^{*}		
T open/free Q	.25	.21	.22	.21	.23	.35	.14	.20	.32	.25	.26	.25	.22	.16	.22	.28	P^{**}	P^{**}	
Dependent C beh.	.22	.20	.17	.22	.27	.28	.13	.21	.23	.26	.29	.29	.13	.15	.21	.26	P^{*}		
T grants request	.22	.22	.20	.21	.29	.29	.19	.18	.27	.28	.28	.22	.21	.24	.20	.20	P^{**}		
T rejects request	.19	.14	.04	.21	.24	.31	.18	.19	.25	.21	.27	.21	.14	.17	.21	.18			
Inapprop. C beh.	.24	.18	.14	.22	.18	.38	.25	.18	.10	.27	.22	.36	.24	.23	.18	.21		E^{**}	P^{**}
Negative T rein.	.23	.23	.18	.22	.16	.34	.27	.21	.20	.28	.26	.28	.26	.24	.18	.23			P^{**}
T process Q	.24	.21	.24	.20	.23	.28	.25	.24	.17	.17	.26	.30	.27	.15	.18	.22			
T product Q	.24	.22	.22	.21	.26	.25	.24	.22	.31	.27	.24	.31	.22	.19	.22	.25			
T does not assess	.24	.21	.24	.20	.24	.21	.23	.24	.20	.28	.19	.33	.17	.17	.25	.23	R^{**}		
T assesses resp	.25	.23	.20	.22	.26	.28	.24	.21	.29	.26	.26	.30	.25	.21	.21	.25	P^{*}		
T gives directive	.23	.21	.22	.21	.24	.26	.25	.22	.27	.27	.26	.30	.23	.22	.22	.24			
T procedural beh.	.21	.24	.15	.21	.18	.28	.27	.24	.35	.29	.22	.32	.11	.25	.19	.26		R^{*}	$P^{*}E^{**}$

Variable[b]	Allen				Prima				Edwards				Ryan				Effect[c]		
	BG	BB	WG	WB	BG	BB	WG	WB	BG	BB	WG	WB	BG	BB	WG	WB	Race	Sex	RXS
Expected interactions[d]	.30	.21	.18	.31	.23	.11	.11	.55	.07	.52	.49	.16	.10	.19	.59	.16			
Actual interactions[d]	.34	.20	.18	.28	.23	.16	.12	.48	.07	.52	.48	.17	.11	.22	.55	.17			
n[e]	6	4	4	6	4	2	2	10	1	7	7	2	2	4	12	3			

[a] In this analysis, the total number of a specific type of interaction (e.g. positive teacher reinforcement) for which the child was present and was a potential recipient was first calculated for each child. The proportion of these interactions in which the child was involved as a participant was then calculated. These individual proportions were then transformed to arc sines, and averages for race/sex cells were then calculated. A separate analysis of variance testing the between-group differences was performed for each class.

[b] See Table 7, footnote b. Three variables (interaction topics Privilege, Inappropriate C behavior, and Health/distress) were excluded from the table because their low frequencies made statistical analysis invalid.

[c] Teacher initials A, P, E, R refer to a significant effect for a particular teacher/class.

[d] Entries are proportions of total interactions going to each race/sex group after student absences were taken into account.

[e] Four children were excluded in the analyses of Ms. Allen's and Prima's classes. The two boys (Ms. Allen's class) and two girls (Ms. Prima's class) were foreigners, culturally neither black nor white, and were learning to speak English as a second language.

*$p < .10$

**$p < .05$

Table 11

Race/Sex Composition of Reading Groups

I. Race

	Teachers							
Rank of Group	Allen[a]		Prima[a]		Edwards		Ryan	
	B	W	B	W	B	W	B	W
1 (Top)	2	6	2	5	1	1	0	6
2	4	1	2	4	4	4	2	5
3	2	2	2	3	2	3	4	3
4	2	1	-	-	-	-	-	-
Total	10	10	6	12	7	8	6	14

II. Sex

	Teachers							
Rank of Group	Allen[a]		Prima[a]		Edwards		Ryan	
	G	B	G	B	G	B	G	B
1 (Top)	4	4	2	5	1	1	5	1
2	3	2	3	3	4	4	5	2
3	2	2	1	4	2	3	3	4
4	2	1	-	-	-	-	-	-
Total	11	9	6	12	7	8	13	7

[a] Four children are excluded from the table for Ms. Allen's and Prima's classes. See Table 10, footnote d.

Table 12

Race and Sex of Seat Neighbors and Isolates

I. Race

Neighbors	Allen			Prima			Edwards		Ryan	
	B	W	O[a]	B	W	O[a]	B	W	B	W
All neighbors (%)	39	53	8	36	57	7	49	51	30	70
White children	43	51	6	37	55	8	58	42	28	72
Black children	36	50	14	26	67	7	37	63	37	63
Isolates (n)	1			1	2		2	2		

Teachers

II. Sex

Neighbors	Allen		Prima		Edwards		Ryan	
	G	B	G	B	G	B	G	B
All neighbors (%)	51	49	39	61	55	45	64	36
Girls	47	53	24	76	48	52	59	41
Boys	57	43	48	52	64	36	75	25
Isolates (n)		1		3		4		

Teachers

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[a] O refers to "Other". See Table 10, footnote d.

Summary and Conclusions

In the first chapter of this book we discussed three main ways in which teachers have been thought of by researchers: as the central figure in the classroom, dominating and controlling the activities of children; as an automaton manufacturing a standardized child product; and as a powerful judge of ability and character on whose pronouncements hangs the fate of her defenseless students. In this exploratory research we have tried to move beyond these narrow and often misleading concepts by relating our observations of life in classrooms to many other aspects of teachers as human beings. For we think it time that researchers thought of teachers as people; people who have personal histories that significantly influence their professional role; people who bring different values and objectives, temperamental qualities and personal predilections into school; people who feel proud or ashamed, indifferent or committed to different aspects of teaching; and most important, people who are insightful knowers of their classrooms, who reflect upon, justify and critique what goes on there, and whose understanding of themselves and of children is as interesting and valuable as that of an outside observer.

We have tried to encompass these and many other themes in our case studies of the four teachers who took part in this research. Throughout, our purpose has been to expand the windows opening on to classrooms, to gain comprehensiveness by considering the perspectives of many different actors involved in the classroom drama, to achieve objectivity by integrating quantitative and qualitative data, in short, to provide a multi-faceted, multi-layered description of complex, intricately interwoven phenomena. In this concluding chapter we shall summarize what we have learned and relate this knowledge to the concepts that have dominated previous research.

The teacher as central figure. Not all teachers are or wish to be the central figure in their classrooms. Even in these "traditional" public school classrooms teachers like Ms. Allen and Ms. Edwards sought to become increasingly redundant to children in the sense of freeing them from dependence on their authority and direction and helping them to function autonomously and cooperatively. We saw this objective realized in our observations in which children in these two classes were less likely to request information and help from Ms. Allen and Ms. Edwards, although when they did so, they were more likely to receive positive responses. Both teachers also seemed to think of interactions among children as valuable learning opportunities. Thus in organizing reading groups and seating arrangements both took interpersonal dynamics seriously into account, exposing the shy to the gregarious, the playful to the diligent, so that one could help and inspire the other. They conceived of basic skill groups as contexts for both academic and personal-social growth and used them as occasions to observe and encourage individual development. Ms. Allen carried her commitment to personality and social development a step further by keeping her reading groups as open and hospitable as possible, allowing children, including those receiving remedial tutoring, to "move themselves up" to more advanced groups as they gathered confidence and skill. Further, she continually changed the seating arrangements in her class so that each child could get to know a large number of seat neighbors over the course of the year. Ms. Allen and Ms. Edwards also seemed to place a higher value on casual conversation, play, and other more relaxed, "child-centered" modes of engaging children, perceiving these as contexts for encouraging interpersonal understanding and self-expression. Nor did they dominate their classrooms in the sense of constantly calling for discipline and order. In Ms. Allen's case there seldom was any need for overt control, for her students were nearly always remarkably orderly, well-behaved and industrious. We speculated that this happy state of affairs was the result of her not nagging, of seeing but not noticing every transgression, and of the quiet, firm but non-threatening way in which she delivered reprimands when these were called for.

Despite these many similarities, Ms. Allen's and Ms. Edwards' first grade curricula differed greatly in academic emphasis. Ms. Allen's stress on academic subjects was consonant with her focus on personal-social development for she genuinely believed that the mastery of basic skills such as reading was fundamental to a first grader's self-esteem. Learning to read helped a six-year old feel competent, confident and proud of himself, moreso perhaps than the mastery of any other skill. Her commitment to this belief was evident in her interactions with children in reading groups (her liberal use of praise, her sparing use of criticism, her delight in relating the reading material to children's everyday experiences, her excitement when the "magic day" dawned and "it all suddenly clicked") and in her collaborative efforts with the reading specialist to design and implement a tutoring curriculum that would truly help children who needed it without making them feel stigmatized. Ms. Allen took enormous pleasure in teaching children to read. She was convinced that all normal children were capable of learning to do so and that it was the teacher's responsibility to ensure that they did. For many years she had been outstandingly successful in producing classes of children reading at and usually well above grade level and the year we conducted this study was no exception. This record of success was a source of quiet satisfaction to Ms. Allen but not more so than her equally well-attested ability to "channel" her students' psychological and social development.

Though similar to Ms. Allen in her general "child-centered" style of interacting with children, Ms. Edwards evidently did not believe that the process and context of learning basic skills in structured groups was conducive to her main objective, personal-social development. Consequently Ms. Edwards deliberately diluted the academic component of her curriculum, reasoning that the learning of social skills (how to get along with other children, how to resolve problems without resorting to physical aggression, how to behave cooperatively with regard to the needs of others), and the development of concomitant personal attributes (independence, self-direction, impulse control, persistence in the face of failure or frustration, confidence, self-esteem) were prerequisites to the mastery of cognitive skills in first grade. The systematic, routine teaching of basic skills also seemed not to be congenial to Ms. Edwards temperamentally. She preferred one-to-one interactions with children and sometimes seemed bored by the repetitive rituals of reading turns and the spoon-feeding that working with less advanced groups entailed. Her style was slow-paced and methodical, well-suited to the task at hand. But inwardly she seemed to question the point of the exercise when what her first graders should really be engaged in was the drama of self-actualization and mutual understanding.

The other two teachers, Ms. Prima and Ms. Ryan, fitted the image of the teacher as the central figure more closely than Ms. Allen and Ms. Edwards although these were by no means equally successful in playing the part. Ms. Prima, for example, spent as much time as Ms. Allen teaching reading and was equally successful at it. She was also an extremely efficient manager of her classroom, ensuring that activities followed one another briskly and little unnecessary time was wasted on procedural matters. For this teacher, however, the main objective was academic progress, not personality or social development. After a brief period of observation and experimentation she structured her reading groups strictly on the basis of skill and, once formed, they remained virtually unchanged throughout the year, although in some cases, the initial distinctions justifying differential assignments were minimal. In organizing or interacting with her reading groups Ms. Prima paid little attention to the chemistry of interacting personalities, to friendships and enmities, or to the children's perceptions of hierarchical distinctions among the groups. In her view, all students in her class got along well with each other anyway, they were not aware of status differences between groups (despite the fact that only children in the top cadre were designated as class helpers or surrogate teachers of other children), and her more advanced groups were as likely to envy her less advanced ones as vice versa, since her fast-paced, challenging, humorous approach to teaching guaranteed that a good time would be had by all. To consider social and psychological factors as criteria for composing reading groups seemed to Ms. Prima an unnecessarily complex approach to a straight-forward academic task. Ms. Prima's relative lack of interest in individual personality was also apparent in her practice of giving group evaluations for behavior and performance. Every day each reading group was praised or criticized as a group and individual children were occasionally chastised for making their group lose points. Ms. Prima seemed to see children primarily as members of a team (a reading group or the whole class) who were in a game to win. Winning -- producing a class full of readers and of academically competent children -- was the primary objective and questions of personality and social growth were distractions from the main event.

Ms. Prima's overriding concern with academic success seemed to us very much related to her recollections of her mother as a "superwoman", to her many experiences of failure as a teenager in school and as an adult in college, and to her present urge to vindicate herself by surpassing her colleagues in reputation as the best teacher around. Her brisk, single-minded approach and lack of interest in the subtleties and contradictions of individual and social development expressed her personal need to structure and control her environment, to move forward quickly and linearly toward clearly defined academic goals, unimpeded by the baggage of unnecessary probing and introspection. Her self-esteem as a teacher derived from her ability to guarantee that all children in her class would be academically successful. It did not depend very much on opinions of how the coach related to the players or the players to each other. When, however, psychological and social problems created obstacles to academic success -- and they often did -- they needed to be tackled head on. For a good teacher is one who makes no excuses for academic failure.

The fourth teacher, Ms. Ryan at the Outer School, spent relatively less time on reading and academic subjects than Ms. Prima but this was not because of a competing priority. Indeed, she thought of herself as "hung up on academic progress", but obstructed from realizing it by the behavior of children in her classroom -- the disorderly conduct of a few and the dependent, babyish ways of many. Consequently, much of Ms. Ryan's time was spent on procedural matters and on behavior control. Like Ms. Prima, Ms. Ryan placed no great importance on personality and social development but attended to various dimensions of psychological functioning insofar as they created behavior problems in her classroom.

The teacher as automaton. Past research conveys the impression that teachers typically perceive and treat all children in their classes uniformly and that their primary objective is to turn out a standardized child product whose knowledge, skills and character are readily measured by tests. The findings of this research hardly accord with this assumption as a general statement about teachers. First, as we have seen, the four teachers varied strikingly in their valuing of academic and personal-social development as educational objectives. It is not surprising then that Ms. Allen and Ms. Edwards also exhibited a much greater interest in individuality and in the process of individuation, that is finding the appropriate methods of relating to individual children. The contrast between this pair of teachers and the other two was apparent in their overall positive views of their six year old students, in the subtle and differentiated nature of their perceptions of children, in their reasoning about appropriate strategies of intervention, and in our observations of their actual interactions with their first graders.

For example, when asked in our interviews to describe individual children in their own terms, both Ms. Allen and Ms. Edwards gave vignettes that emphasized positive characteristics, complexity and variation. Each child seemed to be regarded as truly unique. The origins of individuality were myriad and a child might have many different sides to his personality which he displayed chameleon-like in different contexts. Both of these teachers took an intense interest in monitoring and mapping individual development so as time went on their descriptions of children became even more complex and variegated as they detailed the changes and contradictions they had observed. Ms. Allen in particular seemed to have enormous tolerance for immaturity. For her a first grader's distractibility, dependency, attention-seeking, aggressiveness and the like were merely age-related, developmental phenomena that, with patience and sensitivity on her part, would gradually disappear. A six year old, however "difficult", was not a threat to an adult nor should his behavior be regarded as a personal affront.

In contrast to Ms. Allen's, Ms. Ryan's perceptions of children seemed to start with the negative. Asked to describe her first graders at the beginning of the year she depicted three quarters of them as "spoiled babies" or disruptive and uncontrollable "difficult children". Ms. Ryan admitted she had to make a "conscious effort" to think of the good things in her students, so much so that for a while she experimented with a behavior modification procedure to enable her to perceive and respond to their good behavior. The experiment failed because it did not fundamentally change Ms. Ryan's definition of goodness in a six year old. For her the main elements continued to be good manners, being quiet and orderly, and obeying the rules.

The four teachers' perceptions of parents also varied along with their perceptions of children. With their busy schedules none of the teachers reported visiting students' homes or talking with parents other than at scheduled parent-teacher conferences, occasional meetings and social events in school, or on the telephone. Parents too seldom visited or observed the classroom, some evaded conferences with the teachers, and most ignored PTA meetings. Again Ms. Allen was the teacher who seemed most interested in getting to know parents. She was very active in the PTA, allied herself with parents against the school administration on several political issues, and at least in the case of Simone's mother, maintained extraordinarily close contact, talking with her on the telephone almost every week. Ms. Allen was also less wont than Ms. Prima or Ms. Ryan to make sweeping generalizations about categories of parents. She was pleased to know parents of many different social backgrounds and lifestyles and collaborated with some whom she suspected were abusive or neglectful so long as she was sure that they would not retaliate against the child for exposing the deficiencies of the home. Parents who did so were the one group that incensed her. Ms. Prima, on the other hand, seemed genuinely to like only one group of parents, those from the lower middle class who kept their distance from school, appreciated the teacher's authority and skill, and sent their children to school clean, well behaved, and eager to learn. She seemed to fear or dislike certain other categories of parents including the supercilious, pushy University students and the disorganized, irresponsible militants.

The four teachers were also far from being automatons in the sense that they treated all children in their classes uniformly. Ms. Allen and Ms. Edwards in particular stressed in their interviews the importance of finding the appropriate way of intervening with different children. Thus the strategy that Ms. Allen used with Jesse was quite different from the one she adopted with Mona or Simone. Matching the treatment to the child did not however imply that Ms. Allen and Ms. Edwards were likely to distribute their attention grossly unequally among children. Our observations in fact demonstrated the reverse. The other two teachers, Ms. Prima and Ms. Ryan who seemed less sensitive to children as individuals, were more likely to give some children conspicuously more attention than others, especially negative forms of attention. This finding suggested that the individualizing teacher was one who adopted a general "child-centered" method of interacting with children (that is, a mode rich in praise, sparing of criticism, responsive to requests for help, and encouraging of children's initiative and self-expression) but who, at the same time, was conscious of the inequity inherent in varying either the quantity or quality of her attention too much.

The teacher as powerful judge and arbiter. In research on the self-fulfilling prophecy the teacher is seen as a powerful judge of her students' characters and abilities and a potential maker or breaker of their lives. It is assumed that teachers quickly form basic expectations/judgments about children, based on information relayed by the grapevine, or given by experts, or derived from their own cursory observations, and that these expectations influence the teacher's behavior in such a way as to fulfill the prophecies they imply. This research depicts the teacher as an uncritical, even malicious judge, ready to concur in the condemnation of others, quick to indict and to sentence her defenseless students. This harsh and simplistic portrayal obviously fits none of the four teachers in this study. Rather, as on every other point that we have discussed, their behavior neither corresponded to the research concept nor followed a uniform pattern from teacher to teacher. All four teachers for example said they disregarded readiness scores in their initial organization of reading groups, relying instead on personal observation of children in the first few weeks of school. In other words they ignored the assessment of experts in favor of their own evaluations. But the teachers varied among themselves in the kinds of behaviors they considered relevant and in the flexibility of their decisions. Ms. Allen, for example, believed that the child's confidence in himself was fundamental to learning to read and with increased confidence born of familiarity and experience children would "move themselves up" to more advanced groups. Thus, her initial assignments to reading groups were not necessarily permanent nor were ~~her~~ original judgments self-fulfilling. One might in fact say that she was loath to prophesy; her basic expectation was of change. In contrast Ms. Prima attended only to academic skills and work habits in forming her initial reading groups and once formed they remained virtually unchanged for the year. Nevertheless, it would be misleading to describe her behavior as self-fulfilling in the sense intended by previous research. For Ms. Prima the judgment that a child was slow academically was a challenge to work *harder* at teaching, motivating and disciplining him -- in other words, to invalidate the prophecy.

The four teachers in this study also differed in interesting ways in their views of themselves as responsible for and capable of influencing the "whole child". Consider Ms. Allen once again. She strongly believed that the classroom teacher should shoulder total responsibility for her students. Referring more than a very few children from a class to remedial tutoring or relying on tests and psychological experts to diagnose behavior problems, or calling the office for help with discipline were all "cop outs" from teaching. The "complete" teacher took responsibility for all children in her class, turning to parents first as collaborators if they were cooperative, and to outsiders only as a last resort. Ms. Allen was as good as her word. Although she was unable to prevent some of her students from receiving the remedial tutoring mandated by State law, she worked hard to make the specialist's curriculum and methods compatible with those used in her classroom and to prevent children from being stigmatized. She arranged medical check-ups when she suspected a physical problem and she devised her own methods of classroom therapy with problem children like Jesse, Mona, and Simone. She never involved the school administration in disciplining recalcitrants, considering this to be demeaning to children and a betrayal of their trust in her.

Ms. Prima may also be thought of as a "complete" teacher in the sense that she took full responsibility for children in her class and was highly skeptical about involving experts in solving her students' problems. The main difference between her and Ms. Allen was that Ms. Prima hardly distinguished between academic and behavioral inadequacies. She saw them as having much the same roots and as calling for much the same kind of intervention, namely discipline, control and structure. Temperamentally primed to move quickly and decisively she was impatient with the subtleties and contradictions of psychological diagnosis. In Nicky's case, for example, she resisted both his mother's and his counselor's attempts to get her to consider other ways of perceiving and responding to the boy although, as our own observations showed, the degree of control and criticism she heaped upon him was probably not warranted.

Ms. Ryan exemplified a third pattern. Unlike the two teachers at the Inner School she often turned to outside experts for help -- remedial tutors, counselors, the school office, behavior modification experts, even the observers in this study. Kenneth for example went for academic or behavioral therapy to three different people outside of her classroom several times a week. Of the four teachers she was perhaps the least confident in herself as capable of diagnosing and responding effectively to the problems of her students. She confessed herself baffled by her first graders' behavior and perplexed by the ineffectiveness of her own attempts to change them. By focusing on deficiencies rather than strengths she seemed to create problems in children by defining them to be so, trapping herself in a no-win situation that only increased her frustration, impotence and anxiety and gradually eroding her pride in herself as a teacher.

The teachers' differing reactions to test assessments and to psychological evaluations by experts were also instructive. Discussing the results of an IQ test administered to her class Ms. Allen disputed two thirds of the scores. In almost every case she claimed that the child in question was considerably brighter than his score indicated, his poor performance being attributable to the group setting, to inexperience with test procedures, to poor motor control, to perfectionist standards and so on. For Ms. Allen, none of the children in her class were intellectually deficient. If the tests were properly constructed and administered all would obtain at least average scores and their relative standing would more closely parallel her own judgments of their intellectual ability observed in many different contexts and over a long period of time. For much the same reasons Ms. Allen also challenged the reading readiness scores which automatically determined whether or not a child needed remedial tutoring, and the psychological evaluations mandated for alleged "problem" children. Both devices she felt were insidious ways of labeling children as inferior and often served to bring about the kind of self-fulfilling prophecy that she sought to eliminate from her own relationships with children.

None of the other three teachers was as discerning or as adamant in her opposition to these school practices as Ms. Allen for none was so thoroughly an advocate for children. Ms. Prima, Ms. Allen's co-teacher at the Inner School, did take up Nicky's cause and worked hard to allay his mother's fears that he might be "minimally brain-damaged". But neither she nor the other two teachers seriously disputed other cases of referral to counselors or remedial tutors. In her role as child advocate Ms. Allen had from time to time fought with the Inner School administration and the Charleside school bureaucracy. She sought to "raise their consciousness" and to persuade them to consider the deleterious nature of these school practices. Getting no results, she took steps to protect her own brood by inventing, in her quiet, canny way, every ruse and stratagem she could think of. Thus, Ms. Allen confessed to having "spilled coffee" all over her students' test scores when she found them invalid, she disputed reading readiness assessments in order to prevent children who did not need it from receiving remedial tutoring, she strongly advised parents against consenting to the school's psychological evaluations, she refused to record unfavorable remarks about children in their folders, and she was careful in her conferences with her students' future teachers to emphasize the good in each child and how best to "work around" the less good.

The other three teachers had little taste for Ms. Allen's brand of sabotage. Perhaps also, with twenty years of experience at the Inner School behind her, Ms. Allen could better afford to take such risks. For them, the classroom and their day-to-day interactions with students there was the place where they proved themselves as teachers. In this more modest arena of interpersonal relationships they did not perceive themselves as "making" or "breaking" children's lives, only as enhancing or diminishing them a little. In each classroom though, there were special children to whom these teachers felt deeply committed and whose fate was a matter of intense personal concern. With these special children the teachers saw themselves in a uniquely influential role. They might indeed profoundly affect the lives of these few children. But watching the classroom drama unfold from the sidelines we saw something else as well: the powerful impact that in their turn these children exerted on their teachers. This two-way, intense, even passionate affair was nowhere more vividly seen in this study than in the relationship between Ms. Allen and Simone, and Ms. Ryan and Kenneth.

Simone: Ms. Allen's special child. We do not know exactly what it was about this talented, vivacious, determined black girl that captivated Ms. Allen, the former nun. Perhaps she saw in her the freedom of individual expression denied her in her years at parochial school and the convent. Perhaps it was that Simone exemplified the predicament of a black child capable of succeeding in the system by sheer brains and charisma but equally likely to be cut down by it for being poor and black. Perhaps this child captured Ms. Allen's interest as ammunition for her political battles with the school administration. Perhaps Simone was special to Ms. Allen because she challenged all her skills as an educator, a person who brings out the best possibilities in another. Each of these explanations is plausible and probably true for Ms. Allen is a complex teacher whose perceptions, reasoning and motives are not so nimbly deduced.

Thus, with no particular effort on her part, Simone could have made Ms. Allen think and feel deeply about her. But Simone was not a child to sit back and wait for attention to come her way. By sheer force of personality, intelligence and drive -- when not by her histrionic pouting and sulking -- she compelled Ms. Allen to take exceptional notice of her as an individual. In another classroom Simone might have been written off as a disruptive, egocentric attention-seeker. In Ms.

Allen's however she met a teacher who well understood why she needed to play so grand a role. The challenge for Ms. Allen was to help Simone discard its more extravagant and gratuitous features and seize the essence of the part. We expect that Simone will be a child whom Ms. Allen will remember all her life just as Ms. Allen may be a teacher whom Simone will look back on with appreciation and respect. In a very real sense Ms. Allen has helped to create the Simone we see at the end of first grade. She has tried to educate her, to help her actualize her extraordinary possibilities and to understand what it is within and outside herself that might endanger their realization. But Ms. Allen knows that even at age seven, a child as intelligent, as gifted, as self-willed as Simone is mostly her own pilot. All Ms. Allen can do is to set her on course and hope that the little wisdom she has tried to give her will steer her safely home.

Kenneth: Ms. Ryan's albatross. In his relationship to Ms. Ryan, Kenneth exemplified a different kind of special child. This "difficult, demanding, exhausting" black boy was Ms. Ryan's "child of the year", the one she would not let get the best of her. Ms. Ryan's words are apt for it often seemed to us that she often saw herself in opposition to Kenneth. She and the boy were at combat; the stakes -- her self-esteem and reputation -- were high and she, the teacher, must win.

It was not that Ms. Ryan felt malice toward Kenneth. On the contrary we believe she really cared for him. Affectionate, gregarious, entertaining, he was a boy that other children, especially females, found easy to love. Kenneth was also an easy child to pity. Dependent, insecure, clowning to hide his lack of confidence in himself, he begged a teacher's compassion. Kenneth's problem was simply that he required too much of Ms. Ryan -- too much perhaps of any teacher without special training, special experience, or special talents. Like Simone he compelled his teacher to take exceptional notice of him as an individual but the mode he chose, disruption, defiance, provocation and even physical aggression, was one with which Ms. Ryan could not cope for very long.

Kenneth gained his objective but at great cost to himself and Ms. Ryan. Ms. Ryan's definition of the good child -- orderly, disciplined, industrious -- was so much affronted by this boy's attention-seeking unruliness that a large part of their time together was spent on a futile contest of wills. As she herself acknowledged, one of Ms. Ryan's shortcomings as a teacher was that she found it difficult spontaneously to see the "good" in children when this was juxtaposed with the "bad". Kenneth was the extreme case. He stretched Ms. Ryan's definition of the acceptable and her ability to cope to the utmost and in the end she gave up trying.

So Kenneth achieved his Pyrrhic victory. At year's end he was promoted to second grade, hardly able to read and even less able to come to terms with himself. His success, however bizarre, was in making sure that he was a special child for Ms. Ryan, although in a tragically different sense than was true for Ms. Allen and Simone.

Objectivity. Traditionally, objectivity in social science research has been synonymous with the researcher's perceptions and interpretations of the behaviors of subjects. At best this approach provides us with the views of a non-participant, dispassionate outsider. But a high price is paid in that only visible actions are rewarded and the rationale and meaning of these actions to their authors and audience are ignored. In this exploratory study we tried to go beyond this conventional method of research by according much more importance to the "subjective" data reported by at least one participant in the classroom drama, the teacher. Many lengthy, loosely-structured interviews were undertaken with the four teachers in which they had as much scope as time allowed to discuss their personal background, training, values, objectives, and views of students, parents, and the school administration. These "subjective" data were juxtaposed with the "objective" observational data in case studies of each teacher and consistencies and inconsistencies between the two accounts were pointed out. Further, each teacher was given the opportunity to review her case study and to suggest modifications if she disagreed with our account. One teacher, Ms. Ryan, was severely critical of our account. Since we were unable to reconcile her point of view with ours we have described it in detail in the Epilogue.

We cannot claim that our description of these teachers and their classes is complete or objective. We do not know for example how teachers' and children's behavior was affected by the presence of an observer in the classroom. We also do not know how the responses of interviewees were influenced by our personalities and style, by our race, age, sex, appearance or status as faculty members of a prestigious but allegedly "condescending" and "exploitative" University. We also do not know how either type of data was affected by our explanation of the purposes of the study, its collaborative nature, or its practical benefits. Most important, we do not know what distortions in these data were engendered by our own training, values, beliefs and temperaments as these influenced our selection and definition of observation codes, our perceptions of, reactions to and interpretations of behavior and interview responses, and our selection of themes and details to present in our writing.

We see social science research as a selective process that combines empirical data, rational thinking, intuition and evaluation. Researchers do not function like the lens of a camera; they filter and interpret information in the light of their own training, values, beliefs and temperaments. For example Lightfoot's interest and training in the psychodynamic origins of personality and the manifestation of personality in behavior is apparent in her writing. One of her obvious personal preferences is for the "reflective" teacher who is aware of and takes into account subtle and complex aspects of context and individual personality before acting. Similarly, Carew's interest in and prior research on the effects of day-to-day social interactions on child development is apparent in the case studies she constructed. One obvious personal preference in her case is for the teacher who genuinely delights in young children and is interested in and tolerant of their immaturity. Furthermore, as black researchers we have a more than merely scientific concern about the teachers' perceptions and treatment of minority students. This concern is evident in our accounts of special children in the four classes. Our insight into our own failures and failings and our images of ourselves as sensitive, tolerant and helpful human beings also created conflicts with our role as detached researchers. Conscious that interpretation and evaluation is at the core of social science research it nevertheless distressed us to play the role of witness and judge, to eavesdrop on trouble when we had neither the intent nor resources to be of practical help. The uneasiness created by our inability to resolve this ethical dilemma influences our writing producing tensions, ambivalences and compensating distortions which are not easy to pinpoint. Looking back we worry most about the legitimacy of the non-actor's judgments of the actor, of the non-practitioner's evaluation of the practitioner. We recall Ms. Allen's explanation for joining the study:

> It was from the University, right? So we felt it was about time that we not let only those who could do all the verbalization ... have their say ... I've seen what some of them have done to kids and then they've got the nerve to get up and give their opinion ... and I start to think about the people who really care about children ... I'm not a show-off, not an exhibitionist ... but I felt we had really sat back long enough and said nothing, and it's not right because there's a lot of good going on.

In these remarks we see both the courage and the vulnerability of the four teachers who are the main subjects of this book. We hope that in our writing we have at least described what we saw and heard as honestly as we could.

References

Adorno, T.W., Frenkel-Brunswik, E., Levinson, D.J. and Sanford, R.N. *The Authoritarian Personality*. New York: Harper & Bros., 1950.

Allport, G. *The Nature of Prejudice*. Boston: Beacon Press, 1953.

Anastasi, A. *Differential Psychology*, Third Edition. New York: Macmillan, 1958.

Becker, H. Social class variation in teacher-pupil relationships. *Journal of Educational Sociology*, 1952, *25*, 451-465.

________. *The Outsiders*. New York: The Free Press, 1963.

Bonger, W. *Criminality and Economic Conditions*. Bloomington, Ind.: Indiana University Press, 1969.

Bowles, S. and Gintis, H. *Schooling in Capitalist America*. New York: Basic Books, 1976.

Brenton, M. *What's Happened to Teacher?* New York: Avon Books, 1971.

Brophy, J.E. and Good, T.L. Brophy-Good System (Teacher-Child Dyadic Interaction). In A. Simon and E. Boyer (Eds.), *Mirrors For Behavior. An Anthology of Observation Instruments*, 1970 Supplement, Volume A. Philadelphia: Research for Better Schools, Inc., 1970.

________________________. Teachers' communication of differential expectations for children's classroom performance. *Journal of Educational Psychology*, 1970, *61*(5), 365-374.

________________________. *Teacher-Student Relationships: Causes and Consequences*. New York: Holt, Rhinehart, and Winston, 1974.

Carew, J.V., Chan, I., and Halfar, C. *Intelligence and Experience in Day Care*. Final report to the National Institute of Mental Health, August 1976a.

______________________________. *Observing Intelligence in Young Children: Eight Case Studies*. Englewood Cliffs, N.J.: Prentice-Hall, 1976b.

Carew, J.V., Chan, I., and Halfar, C. Observed intellectual competence and tested intelligence: their roots in the young child's transactions with his environment. In S. Cohen and T.J. Comiskey (Eds.), Child Development: A Study of Growth Processes, Second Edition. Itasca, Ill.: F.E. Peacock Publishers, 1977.

Criswell, J. Social structure revealed in sociometric tests. Sociometry, 1939, 11.

Darwin, C. The Origin of the Species. New York: The Mentor Edition of New American Library of World Literature, 1859.

Dewey, J. Education and Democracy (1916). New York: The Free Press, 1966.

Dreeben, R. On What is Learned in School. Reading, Mass.: Addison-Wesley, 1968.

__________. The school as a workplace. In R. Travers (Ed.), Second Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1973.

Durkheim, E. The Division of Labor in Society (1893). Glencoe, Ill.: The Free Press, 1933.

__________. Suicide: A Study in Sociology (1897). Glencoe, Ill.: The Free Press, 1931.

Erikson, K. Wayward Puritans: A Study in the Sociology of Deviance. New York: Wiley & Sons, 1966.

Erlich, H. The Social Psychology of Prejudice. New York: Wiley & Sons, 1973.

Farber, J. Student As Nigger. New York: Pocket Books, Simon & Schuster, 1969.

Goffman, I. Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

Henry, J. Attitude organization in elementary school classrooms. American Journal of Orthopsychiatry, 1957, 27, 117-133.

Illich, I. Deschooling Society. New York: Harper & Row, 1970.

Jackson, P. Life in Classrooms. New York: Holt, Rhinehart, & Winston, 1968.

Jackson, P. and Lahaderne, H. Inequalities of teacher-pupil contacts. In M. Miles and W.W. Charters (Eds.), Learning in Social Settings. Boston: Allyn & Bacon, 1970.

Jencks, C. Inequality. New York: Basic Books, 1972.

Leacock, E.B. Teaching and Learning in City Schools. New York: Basic Books, 1969.

Lemert, E. Social Pathology. New York: McGraw-Hill, 1951.

Lightfoot, S.L. An Ethnographic Study of the Status Structure of the Classroom. Unpublished doctoral dissertation, Harvard Graduate School of Education, 1972.

______________. Politics and reasoning: through the eyes of teachers and children. Harvard Educational Review, 1973, 43(2), 197-244.

______________. The self-fulfilling prophecy: a complex phenomenon. The Andover Review, 1975, 3.

Lightfoot, S.L. and Carew, J.V. Individuation and discrimination in the classroom. American Journal of Orthopsychiatry, 1976, 46(3), 401-415.

Merton, R. Social Theory and Social Structure. Glencoe, Ill.: The Free Press, 1957.

Merton, R. and Nisbet, R.A. Contemporary Social Problems, Second Edition. New York: Harcourt, Brace & World, 1966.

Neugarten, B.L. Social class and friendship among school children. American Journal of Sociology, 1946, 51.

Olson, W.C. Grouping and growth theory. In A. Yates (Ed.), Grouping in Education. New York: John Wiley & Sons, 1966.

Piaget, J. The Moral Judgment of the Child. New York: Harcourt, Brace & World, 1932.

Rist, R.C. Student social class and teacher expectations: the self-fulfilling prophecy in ghetto education. Harvard Educational Review, 1970, 40(3), 411-451.

__________. Becoming a success or failure in school: a theoretical and methodological synthesis. Unpublished paper, 1975.

Rogers, C. Client-Centered Therapy. Boston: Houghton-Mifflin, 1951.

__________. On Becoming A Person. Boston: Houghton-Mifflin, 1961.

Rosenshine, B. and Furst, N. The use of direct observation to study teaching. In R. Travers (Ed.), Second Handbook of Research on Teaching. Chicago: Rand McNally & Co., 1973.

Rosenthal, R. and Jacobson, L. Pygmalion in the Classroom. New York: Holt, Rhinehart, & Winston, 1968.

Ryan, W. Blaming the Victim. New York: Vintage Books, 1968.

Silberman, C. Crisis in the Classroom. New York: Random House, 1970.

Snow, R. Unfinished Pygmalion. Contemporary Society, 1969, 14, 197-199.

Thorndike, R. Review of R. Rosenthal and L. Jacobson's Pygmalion in the Classroom. Educational Research Journal, 1968, 5, 708-711.

Waller, W. Sociology of Teaching. New York: John Wiley & Sons, 1932.

White, B., Carew Watts, J. et al. Environment and Experience: Major Influences on the Development of the Young Child. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

White, W.F. Psychosocial Principles Applied to Classroom Teaching. New York: McGraw-Hill, 1969.

Appendix A

TEACHER-CHILD INTERACTIONS

Coding Manual

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TEACHER-CHILD INTERACTIONS

Coding Manual

Introduction

The main purpose of this observation system is to describe dyadic interactions between teacher and children. By always identifying the particular child with whom the teacher interacts (when she is interacting with individuals separately or as members of small groups) the system allows the user to isolate each child's individual experiences with the teacher and to create a profile of each child's experiences either for a single observation or for a series of observations. Children of the same sex, race, social class, achievement level, or other characteristics may be grouped and profiles for these groups created by averaging individual scores. Or, if the interest is in comparing one teacher with another, regardless of variation in student characteristics, profiles for all children in the class may be averaged and a class or teacher profile generated.

The system thus allows the user to compare the interactive experiences of individual children in one classroom, of groups of children in one classroom, or of individuals, groups, or entire classes of children across different classrooms. The main research application of this system is in investigating to what extent different individuals or groups of children may encounter substantially different experiences within the same classroom and how this differentiation in experiences may vary across classrooms as a function of independent variables describing the teacher, curriculum, school or other characteristics.

The observation system includes two coding instruments, the Structured Interaction (SI) instrument and the Unstructured Interaction (UI) instrument. The SI instrument is used for on-the-spot coding of interactions occurring in question-answer sessions, reading turns, work recitations, paperwork and the like. (In traditional classrooms these activities usually absorb most of the day.) Interactions occurring in these activities that do not involve questions or demands to perform or that cannot be coded on the spot plus interactions occurring in other activities are coded in terms of the UI system.

The target of observations is the teacher. Using a stopwatch and the SI coding sheets attached to a clipboard, the observer watches the behavior of the teacher during the first 30 seconds of each minute of observation, then codes (in terms of the SI) or describes (for later coding in terms of the UI) the observed behavior during the next 30 seconds. After a little practice, an observer usually finds it more efficient to observe and code/describe the behavior simultaneously during the first 30 seconds rather than waiting to do all of the latter task in the next 30 seconds. Interactions that cannot be coded on the spot in terms of the SI system are coded in terms of the UI system as soon as possible after the observation is completed.

The SI and UI coding sheets are both formatted to indicate consecutive time units (horizontal blocks) and identification or behavior dimensions (columns). Each time unit includes as many interaction units (rows) as occurred in the 30-second observation interval. Interaction units are numbered consecutively within the time unit, one row being devoted to each interaction unit. One code (a digit or a blank) is recorded under each column for each interaction unit, a new unit being coded each time a change in the identities or behaviors of the participants in the interaction requires a change in the coding. Thus both the SI and UI systems allow the observer to record as many interactions as occur in the 30-second interval and to code these along multiple dimensions describing the identities and behavior of the teacher and child interactors.

Coding Sheets and Conventions

I. Information at the top of the page

Identifying items listed at the top of the UI and SI coding sheets are coded identically as follows. These items need be coded only on the first page of each set of coding sheets so long as the activity context (variable 8) or the participants involved in the activity (variables 10, 11, 12) do not change. A change in activity or participants is signalled by continuing the coding on a new coding sheet and making appropriate changes in the codes at the top of the new page.

Variable	Code
Page number	Write the consecutive number in the top right corner of the page.
1. Class ID	1, 2, 3 etc.
2. Date	
3. Observation number	Number of the visit consecutively per teacher.
4. Start	Time at the beginning of the observation, e.g. 9:05.
5. Stop	Time at the end of the observation or period (as in cases where there is a break in the observation).
6. Duration	Time in minutes elapsed between Start and Stop.
7. Observer ID	1, 2, 3 etc.
8. Activity Context	Use code numbers listed below and write in a description of the activity or event. Each new activity or change in group involved in the activity must be coded on a new page.

Academic: #s 1-7

1 = Subject matter lesson; emphasis is on content vs. skill; child's task is to receive knowledge or demonstrate understanding, vs. to show a skill. (e.g. Teacher lectures on the change in seasons.)
2 = Reading and Phonics
3 = Math, counting
4 = Penmanship

Variable	Code

	5 = Other academic work or work recitation (e.g. reciting memorized verbal material, retelling a story, telling riddles).
	6 = Seatwork, homework, or paperwork review. Teacher reviews a child's written materials or work. If this occurs in the context of 2, 3 or 4 then code 2, 3 or 4.
	7 = Self-reference recitation (e.g. show and tell).
	Non-academic: #s 8-10
	8 = Non-academic activity which the teacher suggests or participates in as a main actor (e.g. story-reading, role playing, Simon Says, art projects, etc.).
	9 = Non-academic activity which the child chooses in the play area during "choice" time or at his desk between academic activities (e.g. drawing, games).
	10= Conversation.
	Other: #s 11-13
	11= Rest and recreation (recess, breaks during the day).
	12= Transition periods between organized activity.
	13= Morning routine. Standard operating procedure at the beginning of the day (e.g. getting settled into seats, pledging to the flag, singing songs, noting the day's assignments, noting the date, weather etc.).

9. Activity #	Number of the activity context consecutively per observation, i.e. 1=first activity context observed, 2=second activity context observed etc.
10. # of Cs	Number of children involved in an activity. If this is potentially the whole class, then code the total number of children minus absentees. If this is a subgroup, then code the number of Cs in the subgroup.
11. Who?	Circle the ID numbers of specific children involved in an activity context. If the whole class is involved, circle all ID numbers except for absentees.
12. Rank of reading or math groups	If reading or math groups are ranked, code 1=top group, 2=group next in rank, etc.

Structured Interaction Coding System

The Structured Interaction coding system is to be used in questioning sessions, reading turns, work recitation, and evaluations of seat work and paperwork for on-the-spot coding. The SI instrument is not applicable and should not be used when a child initiates an interaction with the teacher.

II. Column headings: Individual identification and behavior dimensions

Variable	Code
13. Time (Unit#) and Interaction Unit	Consecutive number of the time unit and consecutive number of the interaction within a given time unit. A new interaction unit is coded each time a change in the identities or behaviors of participants in an interaction requires a change in coding of the previous interaction unit.
14. Initiator (1st col.)	Who starts the interaction (e.g. asks a question, makes a demand or approach etc.). Code the race/sex identification number of the initiator. In the SI system this code is always 0 = teacher.
15. Initiator (2nd col.)	Individual ID number of the initiator. In the SI system this code is always 01 = teacher. If a child initiates an interaction with the teacher, the event is recorded in the Notes section of the coding sheet and later coded on a UI sheet.
16. Recipient (1st col.)	The individual child involved in the interaction. Code the race/sex identification number for the recipient as follows. 1 = white girl 2 = white boy 3 = black girl 4 = black boy 5 = non-English speaking girl 6 = non-English speaking boy Asian children are coded as white children unless they are learning English as a second language (codes 5-6). If desired, additional codes may be created for Asian children, Spanish-speaking children, etc. When more than 3 children are the recipients, code 0 = subgroup.
17. Recipient (2nd col.)	Individual ID number of the recipient. If one child, code the individual ID number (02 through 99). If 1-3 children are the recipients, code each child's ID number on a separate line as though individual interactions had occurred. If more than 3 children are the recipients, code 0.

Variable	Code
18. Group Context of the Interaction (Gp.)	The number of children who are witnessing the interaction. This is usually equivalent to the number of children involved in a given activity (e.g. 6 children in a reading group). Code the number of children in the group in which the interaction occurs. If this is the whole class, code the number of children present. When the teacher is involved with a subgroup and momentarily interacts with a child who is not a member of that subgroup, code 50 on the SI sheet if (a) the teacher initiated the interaction and (b) the topic of the interaction is academic (see variable 19). In all other cases the event is recorded in the Notes section and later coded on the UI sheet.
19. Interaction Topic	The content of the interaction (i.e. what the interaction is about). The interaction topic may be the same or different from the activity context coded at the top of the page. For example an interaction concerned with procedure ("Read more slowly" or "Turn to page 5") or with a non-academic topic ("You look nice today") may occur in an academic reading activity context. Conversely, an academic topic may be the focus of an interaction occurring in a non-academic context. Only academic interaction topics are coded in the SI. Procedural, non-academic or other interaction topics occurring in an academic activity context are coded on the UI sheet. Thus in the SI system the specific interaction topic is nearly always coded identically with the activity context (e.g. in a reading activity context [variable 8, code 2] individual children are asked to read [interaction topic, code 2]). Occasionally the academic topic of the interaction is different from that implied by the activity context and the codes differ (e.g. in a reading activity context [variable 8, code 2] the teacher asks a child to count [interaction topic, code 3]). Academic: code numbers 1-7, as defined for variable 8. 1 = Subject matter lesson 2 = Reading and Phonics 3 = Math, counting 4 = Penmanship 5 = Other academic work/recitation 6 = Seatwork, homework, paperwork review 7 = Self-reference recitation.
20. Question/Demand Mode	Enter 1 in the appropriate column defined below. Leave the other two columns blank (only one entry is possible for each interaction unit).

Variable	Code
	Direct question (Dir.). Teacher selects a child to answer a question without waiting for children to raise hands, or if she does wait, she selects a child who has not raised his hand. Often the form of questioning is: Mary, what is X? What is X, Mary? or, What is X? Mary? Code a direct question unless the observer is sure that the teacher waited for hand-raising, then selected from among the hand-raisers. Open question (Open). Teacher selects a child who has indicated he wishes to be asked by raising his hand or some other means. Call out (Call). Child calls out the answer before the teacher has a chance to select someone.
21. Question/Demand Type	Enter 1 in the appropriate column. Leave the other three columns blank (only one entry possible per interaction unit). Process question/demand (Pcss.). Requires child to think through or figure out an answer. Question often begins with Why? How? How do you know? Product question/demand (Prod.). Seeks to elicit a single, short, correct answer. Usually begins with Who? What? When? Where? How many? Choice (Choice). Child is presented with choices from which to select an answer, e.g. Is it this or that? Usually only one of the choices is correct. Free question (Free). Pertains to academic or self-reference questions. No right or wrong answer seems to be expected, although the child's answer must be relevant to the topic at hand; e.g. child may be asked to share an experience, or to describe a picture in his book. Self-reference free questions refer to personal experiences, opinions, preferences or feelings. N.B. Code always in terms of teacher's intent. Is she trying to get the child to talk as opposed to testing his knowledge?
22. Assessment	Enter 1 in the appropriate column. Leave the other 4 columns blank (one entry per interaction unit). No Response (NR). Child makes no response to question. Response (R). Child gives a response to question, but teacher does not assess this response; e.g. Johnny answers, 2+2 is 4, but teacher says nothing, makes no gesture or facial expression, and goes on to another question. Susan reads a sentence correctly, teacher gives no feedback.

Variable

Code

Correct/Complete (+). Teacher indicates (verbally or gesturally) that the answer or product is correct or complete; e.g., Okay, that's right. Yes. You've finished that. Teacher repeats child's correct answer.

Partially Correct (±). Teacher indicates that some part of the answer is correct/complete, and some part is incorrect/incomplete; e.g., You got this right, but that's wrong. You did this, but you have to finish that.

Incorrect/Incomplete (-). Teacher indicates that the child's answer or product is incorrect or incomplete; e.g., No, you didn't do it right. No, you haven't done this paper yet. Be careful with your writing (meaning it was not correctly done).

N.B. Throughout this section, code only what the teacher actually says or does in response to a child's answer, not whether the answer was correct or incorrect to the observer. This means that all answers which are not responded to by the teacher (both correct and incorrect answers) are coded under Response, no assessment (R).

Coding Assessment: Specific Situations

Extended turns (such as reading turns). Code each teacher response as often as it occurs. Each error correction is coded on a new line. Overall assessment or evaluation at the end of a turn is coded separately on the last line coded for that extended turn, and the Global (All) column is checked. Two separate feedback responses are coded on separate lines. For instance, child reads "The cat sat (Teacher: That's right [code in 1st row]) on the man (T: Not man, mat [code in 2nd row])."

For extended turns, the Row # column is coded indicating sequentially the row number of each teacher response in the series of interactions with a single child. In the example above, a "1" would be coded in the Row # column for the first teacher response, and a "2" would be coded in the Row # column for the second teacher response.

Paperwork review. Code only the teacher's actual verbal or gestural response in the assessment section. For example:

a) The first two letters are right, but the last is wrong. (±)
b) This page is finished, but you forgot the other side. (±)
c) Something is missing on this paper. (-)
d) Child shows completed paper, teacher nods. (+)

In paperwork review, the teacher may use rhetorical questions, implying criticism:

e) Did you circle the numbers? (meaning, you did not complete the task) (-)

Distinguish this from work-procedure questions which occur when the teacher is not actually reviewing work.

f) Aren't you supposed to circle the ones that are greater than? (meaning child did not do the task correctly) (-)

Variable	Code
23. Evaluation	Enter 1 in the appropriate column. Leave the other three columns blank. Only one entry is possible per interaction unit. No entry is also possible. High praise (‡). Teacher gives special privilege or reward to a child, calls the attention of the group to a child's performance, or shows approval physically (e.g. hugging). Mild praise (+). Teacher makes statement such as Good, Very good (said in a matter-of-fact way), Fine, Thank you. Praise and criticism (±). Good, but you have to do this one over. Fine, but you forgot to write your name. Criticism (-). Includes both mild and severe criticism and sarcasm. N.B. No response and ambiguous or quizzical teacher responses are not coded, e.g. Hmmm. You think that X will do Y?
24. Terminal Feedback (End)	Enter 1 in the appropriate column. Only one entry or no entry is possible per interaction unit. Process (Pcss.). Teacher provides the process answer. Product (Prod.). Teacher provides the product answer. Other (Other). Teacher calls on another child to supply the answer. Call out (Call). Another child calls out the answer before the teacher has a chance to respond.
25. Sustaining Feedback (Go On)	Enter 1 in the appropriate column. Only one entry or no entry is possible per interaction unit. Repeat (Rept.). Teacher repeats the question/demand, although not necessarily in the same form; e.g. teacher may ask What color is this? then repeat, What color? Do you know? Well? Clue (Clue). Teacher gives a clue or rephrases the question to help the child. Teacher seeks the same answer as for the original question; e.g. What color is this? Is it red or blue? It's the same color as your dress. New question (New Q). Teacher asks a new question which seeks to elicit a different answer, or makes a new request for the child to read. The new question may be easier or harder than the original, or may be on a different theme; e.g., Well, what color is this one? Is the color brighter or duller? Is it square or round? N.B. Criticism questions should not be coded here, e.g.

Variable

Code

Haven't you been paying attention? is coded as criticism. If a child responds to criticism or to sustaining feedback, code it on a new line and number the first line "1" and the second line "2" etc. in the Row column.

Sustaining feedback is coded as often as it occurs as long as the teacher pauses long enough for the child to respond and he does so. Redundant repetition of questions (without pause) is coded only once, e.g. Well? Do you know?

Sustaining Feedback for Paperwork:

Repeat. Teacher asks that the task be done again. Teacher repeats the demand for the task, or asks child to correct/complete work. Often the teacher hands the paper back to the child after she has stated that the work is incorrect/incomplete.

Clue. Teacher asks that the task be done over, but gives information/help as to what is wrong or as to how to correct or complete it.

New question. Teacher requests a child to do a new task or go on to a new part, e.g.

a) Teacher to Mary: Did you circle the numbers? (implying that the task is incomplete) T hands paper back to Mary. Code Assessment (-) and Clue.

b) Teacher to Mary: Are you supposed to circle those that are greater than? (implying that task was done incorrectly) T hands paper back to Mary. Code Assessment (-) and Clue.

c) Teacher to Mary: This isn't right. T hands paper back to Mary. Code Assessment (-) and Repeat.

d) Teacher to Mary: Okay. Now go on to the next page. Assessment (+), New question.

e) Teacher to Mary: You didn't do this right. Go back to the first page and review the steps. Code Assessment (-), New question.

A frequent case is that the teacher makes ✓ and X marks on the paper, then hands the paper back, saying, Okay, but correct these (incorrect items). Code Assessment (-), Repeat. Although the assessment is probably (±), it would be difficult to see what was actually marked on the paper.

26. Global Evaluation (All)

Teacher is responding to a global performance rather than to a discrete child performance (e.g. in a global evaluation at the end of reading). Use this code sparingly.

Variable	Code
	Limit use to occasions when teacher gives error feedback, but also gives a positive evaluation at the end regarding overall performance. In paperwork review, teacher may say, All of this is correct, but you made an error here. Code Assessment (±) but do not code Global. If teacher says, All of this is correct, now do the next page, code Assessment (+) and New question but not Global.
27. Row Number	Number consecutively within a 30-second unit, the rows belonging to an interaction chain between the teacher and one child.

Sample coded SI protocol

A sample coded Structured Interaction protocol is given below. The order of columns for variables 14 through 19 has been changed slightly to facilitate on-the-spot coding of structured situations.

PAGE 8

1. CLASS ID 4 2. DATE Jan. 5 3. OBSERVATION # 6 4. START 9:30 5. STOP 9:45 6. DURATION 15 7. OBSERVER ID 2

8. ACTIVITY CONTEXT 2 Reading 9. ACTIVITY # 3 10. + OF Cs 7 11. WHO? 02 03 04 [✓ 05] 06 07 08 09 [✓ 10] 11 [✓ 12] 13 14 15 16 [✓ 17] [✓ 18] 19 [✓ 20] 21 22 [✓ 23] 24 25 26 27 12. RANK 1 "The Fat Cats"

Time	Gp	Topic	Init		Recip		Question/ Demand Mode			Question/ Demand Type				Assessment					Evaluation				End				Go On			ALL	ROW #	NOTES
							DIR	OPEN	CALL	PCS	PROD	CHOI	SEL	NR	R	+	±	-	++	+	±	-	PCS	PROD	OTHR	CALL	REP	CUE	NEW Q			
32.																																T: Fat Cats, put everything away and come up here. Close your workbooks. C: My mother says I have a molar. T: Oh, is it coming up?
33 1.	7	2	0	01	3	18		1			1					1				1												
2	7	2	0	01	2	05	1				1				1												1				1	
3.	7	2	0	01	2	05	1				1			1											1						2	
4.	7	2	0	01	4	23			1	1						1			1													
34. 1.	7	2	0	01	1	17		1			1				1									1								T: Bobby, hang up your jacket or put it on, one or the other.
2	7	2	0	01	5	12	1				1							1											1			
3	7	2	0	01	2	20		1				1		1																		
35.	7	2	0	01	3	18	1				1						1															T: Linda, you may come up with this group. T gets a chair. Tim: Not many words start with "ch" T: Well, you have to think. Phil, sit right. Phil complies.

Unstructured Interacting Coding System

The Unstructured Interaction coding system is used to code all teacher-initiated interactions that do not involve questions or demands to perform or that cannot be coded on-the-spot in terms of the SI system, and all child-initiated interactions. The UI variables are coded from notes made in the SI Notes section during the SI observations.

II. Column headings: Individual identification and behavior dimensions

The first 7 variables below (numbers 13-19) are the same as those in the SI system but with certain exceptions and additions.

Variable	Code
13. Time (Unit #) and Interaction Unit	Same as in SI
14. Initiator (1st col.)	Same as in SI, except that in the UI system either the teacher or the child may be the initiator of an interaction. Use information from the time elapsed before the 30-second observation unit if known. Code the teacher as initiator when she starts an interaction by reacting to a child's behavior (e.g. Jimmy is talking loudly and teacher says, "Jimmy, please be quiet."). Code the initiator's race/sex identification number below. 0 = teacher 1 = white girl 2 = white boy 3 = black girl 4 = black boy 5 = non-English speaking girl 6 = non-English speaking boy Asian children are coded as white children or as non-English speaking children, or additional codes may be added for Asian children, Spanish-speaking children etc.
15. Initiator (2nd col.)	Individual ID number of the initiator. Teacher = 01 If one child, code the individual ID number (02 through 99).
16. Recipient (1st col.)	Same as in SI
17. Recipient (2nd col.)	Same as in SI
18. Group Context of the Interaction (Gp.)	Same as in SI
19. Interaction Topic	Same as in SI, except that procedural, non-academic or other interaction topics are coded as well as academic topics (for interactions which do not involve questions

Variable	Code
	or demands to perform or which the child initiates). The coding of the interaction topic depends primarily on the behavior and intentions of the initiator of the interaction. E.g., teacher says to Billy: Do the math problem on page 3. Billy: I don't want to! (Interaction topic Academic, code 3). Child to teacher: Can you help me with these words? Teacher: Go back to your seat. Can't you see I'm busy! (Interaction topic is Academic, code 2).
19. Interaction Topic: Academic	Academic: Interactions related to academic content and especially to the subject matter of activities. Select corresponding code numbers 1-7, as defined for variable 8 (Activity Context). 1 = Subject matter lesson 2 = Reading and Phonics 3 = Math, counting 4 = Penmanship 5 = Other academic work/recitation 6 = Seatwork, homework, paperwork review 7 = Self-reference recitation. E.g., T: Come to the board and tell us which has less. C points to answer. (code 3) T: Let's make a nice tall H. (code 4) T explains Chinese New Year to class. C: I love fortune cookies! (code 1) T: Find 10 hearts. C: Is it a game? T: On your paper. (6) T: Does man begin with m or n? (2) T administers IQ test to class. (5) C: I know this is orange. T: How can you tell? (code 1) C: This letter is a hook with a dot. I made it perfect! (code 4) C: Here's a set of 4, and here's a set of one more. (3) C: I can make a sentence with "is". T: Please be more quiet. (2) C: I've got my show and tell ready. T: Tell us all about it. (7)
19. Interaction Topic: Non-academic	Non-academic: Interactions related to non-academic content as in story-telling, games, and conversation. Select corresponding code numbers 8-10, as defined for variable 8. 8 = Non-academic activity suggested by teacher 9 = Non-academic activity chosen by child 10=Conversation. E.g., T: Did you do something special during vacation? C: I went to the Ice Capades. (code 10) C: I colored all my valentines already! T: They're very pretty. (code 8)

Variable | Code

C: I made a big block tower. T: Try not to knock it over. (code 9)
C: Can I be the dragon? I never get a turn. T: Okay, and Billy can be the knight. (code 8)

19. Interaction Topic: Other

Other: Interactions related to specific events of the day such as rest periods or morning routine. These codes are rarely used because most interactions in the context of rest and recreation, transitions and routines are procedural (topic 22, below), e.g. teacher takes attendance or collects lunch money, teacher directs clean-up time. In appropriate cases, select corresponding code numbers 11-13, as defined for variable 8.

11 = Rest and recreation
12 = Transition periods
13 = Morning routine.

E.g., C: We have recess every day but not parties. T: Yes, parties are special. (code 11)

19. Interaction Topic: Procedure

Procedure

21 = Work related procedures.

The interaction is concerned with if to do, when to do, how much to do, completion of, neatness, speed, care and form of work rather than the substantive content of work. Distinguish between concern with mastery of a problem (academic topic) vs. the manner of doing it or giving/receiving directives (procedure). E.g., C: How do I do this/What do I do? T: Match the numbers with the objects. Look at the picture, then circle the letter with the same sound. (academic topics 3, 2) In contrast, C says: What do I do? T: Do this paper over. Write your name. You have to color here and here. Finish both sides, etc. (procedural topic 21).

E.g., form - T: Don't go over the line. Speak up. Raise your hand first. C: I did it backwards. I made it too big.

when to do, order in which to do - T: Do this paper now, and the other one later. Don't start until I tell you. C: Which page do I do first?

directive to do - T: Open your workbooks. Tear out this page. Bring up your folder so I can check it.

if to do - C: Should I do page 1 or 2? Should I do this paper now?

completion - T: Have you finished your paper? Did you miss any problems? C: I'm all done. Here's my phonics paper. I colored every bit of it.

Variable | Code

neatness, speed, care, waste - T: Your paper's a mess. Don't hurry so much. Be sure you read each question carefully before you answer it. Don't use so much paste.

22 = Class management procedures

The interaction is concerned with supplying materials, giving permission to do something other than work, giving instructions on where and how to sit, line up, etc. and when to do a task or activity other than work.

E.g., T: You may return to your seats now. When I call your name, bring up your lunch money. No, you may not play cards now. Clean your desks and get ready for lunch. C: Can I move my desk? Do we have gym today? I need a scissors.

23 = Self-care procedures

The interaction is concerned with the child's routine basic care such as dressing/undressing, going to the bathroom, getting a drink of water, blowing one's nose.

E.g., T: Do you need help tying your shoes? Do you need a tissue? Don't forget to wear your mittens. C: My tights keep falling down. I need to fix my ponytail. Can you help me untie this knot? I can't get my boot off.

19. Interaction Topic: Privilege

Privilege

24 = Privilege

The interaction is concerned with a special or privileged role which the teacher gives a child or which a child requests, or a favor the teacher asks a child to do.

E.g., T: Mary, will you please take this to the office. Bill, you be the leader today. Please pass out the papers. Let's all sing Happy Birthday to David. C: Can I hold the door? Can I lead the Pledge? I want to be first in line. Can I erase the board?

19. Interaction Topic: Child Behaviors/ Characteristics

Child behaviors/characteristics: Child behaviors or child characteristics can become the topic of an interaction when the teacher actively takes notice of them or makes reference to them, e.g. in praising a child for his appropriate behavior or scolding him for his inappropriate behavior. The following child behaviors/characteristics are to be coded as the topic when it is clear that the interaction is concerned with the child's behavior/characteristics.

Appropriate child behaviors

31 = Teaching, helping behaviors.

Variable

Code

Child acts as a teacher surrogate with peers, and teaches or helps another child on academic or non-academic tasks, games, basic care, etc.
E.g., C: You're supposed to do it this way. T: You're such a good helper. Thank you for helping me.

32 = Overt acceptance of teacher and school values, standards and rules.

Child shows the teacher he/she is "with" her by making comments which reflect the teacher's values and standards.
E.g., C: It's nice to read. We must all take turns/share/help. All you have to do is try. T: That's a good attitude to have. I'm glad to hear that.

33 = Enthusiastic comments; contribution and sharing of ideas.

Child expresses enthusiasm about an activity, contributes ideas or makes suggestions.
E.g., C: Let's do it this way. T: That's a wonderful idea, Johnny.

34 = Exhibition of pride in product or performance.

E.g., C: Boy, I really did a good job. T: You deserve to be proud of it.

35 = Seeking of opportunities to perform or showing an eagerness to perform.

E.g., C: I know the answer! I want to do it. T: You're such an eager beaver!

36 = Seeking evaluation of product or performance. Also includes times when child brings work to teacher and indicates he has completed it.

E.g., C: Is this right? Is this good work? T: Do you have to ask me every time?

37 = Spontaneous helping behaviors; volunteering to do a non-academic task or favor for the teacher (other than seeking a privilege).

E.g., C picks up chalk from floor and gives it to T. C erases blackboard without being asked. T: Thank you.

38 = Overt compliance to a teacher request or directive.

E.g., C: Okay, I'll do it. I'll clean my desk. T: You're so obedient. Thank you.

Variable | Code

Inappropriate child behaviors

41 = Resisting authority, challenging, criticizing, or defying the teacher; also includes cheating on work.

E.g., C: I won't do that paper! You're a mean teacher! T: That's enough of your backtalk. Are you ready to join the group nicely? You've got wandering eyes again.

42 = Display of aggression. Includes physical or verbal fighting, grabbing, pushing, hitting, kicking, breaking, tearing etc.

E.g., T: Hands are not for punching and hitting. If you push in line, you can't come along. Stop this wrestling right now! It's dangerous to throw things at people.

43 = Personal disruption of other children. Includes teasing and "bugging" others, mimicking, annoying, criticizing, preventing others from working, interrupting, name-calling, belittling.

E.g., C: John is a cry baby! That's an ugly picture. T: Don't bother your neighbor, he's working. It's not necessary to be rude. You're really a pest today.

44 = Disruption of class or group activities or order. Includes loud talking, noise, humming, running around, horseplay, singing, dancing, etc.

E.g., T: Are you quite through clapping? Keep your feet still, we have enough noise. Please don't shout, we can hear you. If you can't sit quietly, you'll have to leave the room.

45 = Non-disruptive off-task behaviors. Includes inattention, passive resistance (no response), noncompliance, ignoring directions, idling, walking around, coming late to school etc. Also includes non-cooperative behaviors such as refusing to help or follow instructions.

E.g., T: You're not listening. Pay attention. It's not play time, it's work time. Don't wander around, do your seatwork. I asked you please to get in line. I told you to put that toy away (or, T takes toy away).

Distress

46 = Showing of distress, discomfort, or fear.

E.g., T: What's bothering you? Are you afraid? Tell me what's wrong. Why are you crying?

Variable | Code

Personal quality

51 = Intellectual ability. Refers to a child's intelligence, ability in school and on academic tasks, ideas, attentiveness, task orientation (hard worker vs. lazy).

E.g., T: James, you're really a bright boy. My, you work so hard.

52 = Social/leadership ability. Refers to a child's ability to get along with peers and carry out leadership functions such as leading the Pledge of Allegiance, leading the class to lunch.

E.g., T: Sally is really a good leader, and you should all try to be more like her.

53 = Appearance. Refers to a child's way of dressing, neatness, cleanliness in appearance.

E.g., C: Do you like my new clothes? T: Very nice. You look so handsome today! Tuck your shirt in. Your face really needs to be washed.

54 = Health. Refers to the way a child feels physically.

E.g., C: Did you know I was sick? My ear hurts. T: Do you have any medicine? You don't look well. Are you tired? You have a bad cold, don't you.

Expressive qualities

61 = Affection, happiness. Refers to a child's good mood, happiness, or expressions of affection on the part of the child.

E.g., T: I'm glad to see you're so cheerful!

62 = "Bad mood." Refers to a child's expressions of moodiness or negative attitude.

E.g., T: Mike, why are you so grouchy today?

28. Child Behavior

The specific behavior exhibited by the child in interaction with the teacher. If the behavior does not occur in the context of interaction with the teacher it is not coded. As noted above, the child's behavior occurring outside of an interaction with the teacher can become the topic of an interaction which she initiates (e.g. to make an issue of that behavior). However, to be coded in this column the child's behavior must have occurred during the interaction with the teacher. In some cases the child's

Variable | Code

behavior initiates the interaction. In other cases the child's behavior is simply responsive to the teacher's initiation (e.g. T: Read this sentence. C: Yeah, I love to read.), or occurs incidentally in the context of the interaction.

Child behaviors coded in the UI system

Appropriate Work-Related Behaviors

11 = Teaching, helping. Child acts as a teacher surrogate with peers, and teaches or helps another child on academic tasks.
e.g., T designates C as a "class helper". C to peer: You're supposed to do it this way.

12 = Overt acceptance of teacher and school values, standards and rules. Child shows the teacher he's "with" her, by making comments which reflect the teacher's values and standards.
e.g., It's nice to read. All you have to do is try. We must all take turns/share/help. Those who won't keep quiet won't get a turn.

13 = Enthusiastic comments; contribution and sharing of ideas. Child expresses enthusiasm about an activity, contributes ideas, or makes suggestions.
e.g., Yea! I like that game! Let's do it this way.

14 = Exhibition of pride in product or performance.
e.g., Look at my drawing! Boy, I really did a nice job this time. (To be distinguished from an evaluation-seeking statement, which asks the teacher to make a judgment about his product or performance, e.g. Do you like this picture? Is it good work? If there is doubt, code 16, evaluation of product or performance.)

15 = Seeking of opportunities to perform, or showing an eagerness to perform.
e.g., I know the answer! I want to do it. Can I have another turn? Can I be with that group?

16 = Seeking evaluation of product or performance. Also includes times when a child brings work to the teacher and indicates that he has completed it.
e.g., Is this right? Is this good work? Ms. Jones, I'm done with this (i.e., please look at it).

17 = Spontaneous helping behaviors, volunteering to do a task (non-academic) or favor for the teacher.
e.g., Child picks up chalk off the floor and gives it to the teacher. Child cleans off the blackboard for teacher without being asked.

18 = Overt compliance in response to a teacher request or directive.
e.g., Okay, I'll do it. Okay, I'll clean my desk. Okay.
(To be coded only when an overt response by the child occurs within 30-second time unit of observation.)

19 = Child makes a comment, gives an opinion, or converses with the teacher. Comments may focus on substantive academic material, procedures, or the child's personal experiences, perceptions, and feelings.
e.g., Child says to teacher, On Sunday we made a snowman!

Child Requests

21 = Child asks for clarification or information. Requests for both procedural and cognitive information are included.
e.g., Where should I put this? What time do we leave? Do this page? What's this word? Why does 2+2=4?

22 = Child asks for help.
e.g., I can't find my crayons. Please tie my shoelace. I can't do this work (please help me with it). I made a mistake.

23 = Child asks for materials.
e.g., May I have a pencil? I need a piece of paper.

24 = Child asks for permission or asks to do something.
e.g., May we play the color game? May I go to the bathroom? May I sharpen my pencil? Will you (teacher) read this book?

Mild Inappropriate Behaviors

31 = Child complains about academic work, not being permitted to do something, feeling bad, etc.
e.g., This work is too hard. I wish I could play now. I'm tired.

32 = Child tells tales, tattles on another child.
e.g., Johnny pushed me! Ms. Smith, Ann is cheating!

33 = Child makes excuses for unfinished work, inappropriate behavior, not following directions, etc.; i.e., child attempts to justify his actions or behavior.
e.g., I haven't had time to finish my paper. I couldn't help that, because I was tired.

34 = Child bosses other children, tells them what to do, or threatens them.
e.g., If you don't stop it, I'm going to tell the teacher! You shouldn't do that! You're not supposed to touch that.

35 = Child denies wrongdoing.
e.g., I didn't do it. I wasn't the one.

Clearly Inappropriate Behaviors

41 = Resisting authority, challenging, criticizing, or defying the teacher; also includes cheating on work.
e.g., I won't do that paper! If you would stop reminding me, I could finish it! No, I won't help her! I don't like that picture you drew. Someone said you were a mean teacher.

42 = Display of aggression. Includes physical or verbal fighting, grabbing, pushing, hitting, kicking, breaking, tearing, etc.

43 = Personal disruption of other children. Includes teasing and "bugging" others, mimicking, annoying, criticizing, preventing others from working, interrupting, name-calling, belittling.
e.g., John is a cry-baby! That's an ugly picture.

44 = Disruption of class or group activities and order. Includes loud talking, noise, humming, running around, horseplay, singing, dancing, etc.

45 = Non-disruptive off-task behaviors. Includes inattention, passive resistance (non-response), noncompliance, ignoring directions, idling, walking around, coming late to school, etc. Also includes non-cooperative behaviors such as refusing to help or follow instructions.

Expressive Behaviors

51 = Child expresses affection.
e.g., I love you. I like you. Child hugs the teacher or takes hold of the teacher's hand.

52 = Child expresses humor, jokes.
e.g., Child laughs in the context of a riddle or joke. Child tells a joke and laughs.

53 = Child asks for sympathy or attention.
e.g., My stomach hurts. I have a headache. I hurt my finger.

54 = Child displays shyness or embarrassment.
e.g., Child withdraws when approached, or speaks in a very soft voice when asked a question, etc.

55 = Child shows distress, discomfort or fear.
e.g., Child cries or whimpers. I'm afraid of it, etc.

56 = Child apologizes to the teacher for misbehaving, wrongdoing, etc.

Variable	Code
29. Teacher Behavior	The specific behavior of the teacher occurring in interaction with the child or children.

Teacher behaviors coded in the UI system

Teaching/Giving Information

11 = States rules, values, standards.
e.g., You always raise your hand when you want to speak. Hitting people is not a nice thing to do. When we come to school, we must sit quietly. We do not play games during reading period.

12 = Instructs, explains how to do academic work.
e.g., We write "d" like this (T writes on board). Now, on this page, you are to circle the pictures that begin with "c". Read this page silently to yourself. Please color the pictures on that page.

13 = Gives substantive, non-routine information on academic or non-academic subject matter. Includes reading a story, explaining how one can tell that the 2 math sets are the same, etc.
e.g., This word is called a compound work because it's made up of 2 smaller words. That word is read "sunlight".

14 = Gives routine information on class routine, procedures, etc.
e.g., Today we're going to the library at 10:00. First do your phonics paper, then do your math paper.

Checks Up/Questions

21 = Teacher asks a procedural or other non-academic question (not in the context of Topics 1-6).
e.g., Where's your work? Did you do your homework? Have you finished your work? What's this? Is this your paper? Did you put it on my desk?

22 = Teacher asks a question concerning the child's grasp or understanding of academic subject matter, or work-related procedures.
e.g., Do you understand this? Do you know how to do it? Do you know what to do on this paper?

23 = Teacher asks a child to report on another child.
e.g., What was David doing? Tell me, was Mary a good girl at lunch time?

Controls/Directs

31 = Encourages, reassures a child about something.
e.g., Go ahead, you can do it. Go on. Don't worry about it. That's okay, it will be all right.

32 = Directs a child to do something, gives a directive to promote behavior rather than to inhibit it.
e.g., Please put everything away now. Come here please. Do your work.

A directive such as Sit down and be quiet! would be coded as 34, directs a child not to do, as it inhibits a behavior (noisiness).

33 = Gives child a choice of what to do.
e.g., You may do this now, or do it after lunch. You may work now, or play now.

34 = Directs child not to do, or to cease doing. This is coded if the observer is certain that the directive was made to inhibit, rather than promote behavior.
e.g., I'm waiting for you ... (to be quiet). Don't do that now. Be quiet. Sit down and do your work (if child is idling). Andy! (when a teacher only uses the child's name, but wants to inhibit the child's present behavior, as in noise, inattention, etc.).

35 = Reprimands or scolds a child. This may be phrased as a question.
e.g., John! Weren't you supposed to clean your desk? You know that you weren't supposed to do that, don't you? Didn't I ask you to be quiet? I don't know what to do with you! You're just acting like a little baby today! I wish you would listen to what I say, and follow directions!

36 = Harsh scolding, including verbal or physical punishment.
e.g., Okay, you can't go outside with the rest of the children, because you were so naughty this morning.
The teacher physically restrains a child from going out, or pulls him outside the classroom for misbehaving.
e.g., Susan! Go to the principal's office.

Justification of Action

41 = Gives an "objective" or other "good" reason for actions.
e.g., We can't play outside today because it's too cold.

42 = Appeals to rules.
e.g., Now that it's rest time, we should all be quiet. We can't do that because it's not fair.

43 = Appeals to authority ("Because I say so")
e.g., The principal says we can't eat in the classroom. Be quiet, because I say so.

Consequences (If you do/don't do, then...)

51 = Offers positive inducement, incentive.
e.g., If you are quiet, we can go to the playground. If you're good today, we'll have a surprise. If you work really hard now, we can have recess later.

52 = Threatens punishment, withdrawal of privilege, etc.
e.g., If you're not good today, we won't have any recess. Anyone who talks will have to go to the principal's office.

Permission

61 = Gives permission.
e.g., Yes, you may play with that. Yes, Mary. You may get in line. You may join us.

62 = Defers permission or makes permission contingent.
e.g., You may do that when you finish your work. You may go after lunch.

63 = Refuses permission.
e.g., No, you may not. No, you can't have another turn.

Help

71 = Gives help, including providing materials, tying shoelaces, rolling up sleeves, helping a child on academic or non-academic tasks, etc. Often, the child first approaches the teacher, then is given help.

72 = Questions the child in response to a request for help.
e.g., John comes up with his paper to ask for help. Teacher says, What do the directions tell you to do? Mary asks how to read the word "sunshine". Teacher asks, How do you sound it out?

73 = Defers help, refers child to another for help.
e.g., I'll help you later, Mary. Please wait until I'm done with this group. Ask John, he knows how to do it. You'll just have to wait.

74 = Refuses help.
e.g., No, you should know that. I'm not telling you, figure it out yourself. You know what to do, so I won't tell you. I explained it once, and I'm not saying it again.

Feedback (In relation to academic or non-academic tasks)

81 = Correct/complete/wholly satisfactory.
e.g., That's right! Okay. You did this page correctly.

82 = Partly correct/partially satisfactory
e.g., No name! (on this paper). This is right, but this one is wrong. This is okay, but fix your letters.

83 = Incorrect/incomplete/wholly unsatisfactory.
e.g., You haven't finished it. No, this isn't right. I want you to correct this page (meaning it's unacceptable).

Evaluation

91 = High praise.
e.g., Oh, what an excellent paper! You're such a good leader! That's really a great idea!

92 = Praise.
e.g., That's good. That's nice. Fine. Good. That's interesting. Thank you (in response to a child's doing a favor, etc. for teacher).

93 = Praise and criticism.
e.g., This is good work, only this one needs to be corrected. This is a nice picture, but it's a little messy.

94 = Criticism only.
e.g., No, that's bad. What a mess you are! No, you're silly today, not sharp. That's not good work.

95 = Accepts apology.
e.g., That's okay. Okay, you're forgiven.

96 = Refuses to evaluate.
e.g., I don't have time to look at it now. I'm busy.

Sustains Task

101 = Repeats question, repeats a demand to do a task (in a complete or correct way). Assume that the task is not complete or correct when coding this.
e.g., Teacher says, Mary, please do your work. Mary wanders around the room, and teacher says, Mary, I said please do your work. Go back and finish it/do it correctly.

102 = Directs child to do a new task.
e.g., Okay, now go on to the next page. Go back and do some different pictures. Why don't you do another one.

Participates

111 = Teacher joins in an activity with the children, such as in role-play where she tries to guess what roles the children are playing. Singing or playing games are also included, when the teacher is involved as a member of the activity.

Listens

121 = Teacher listens to comments or opinions of a child, without making any comments in return.
e.g., Mary tells the teacher about what she did on Sunday, and the teacher nods and smiles. John tattles on Bill; the teacher listens to John, then scolds Bill.

Teasing, Joking

131 = Teacher shares in the expression of humor with the children. Included are laughing, telling jokes and riddles, teasing a child.
e.g., Oh, poor Mike gets caught every time! I give up, why does a fireman wear red suspenders?

Conversation

141 = Teacher engages in conversation with a child. Topics could be related to academic or non-academic tasks, or some aspect of the child's perceptions, feeling, preferences, or personal experiences.
e.g. Child: That was a nice story we read. Teacher: Yes, I liked that too. Child: My mother had a baby yesterday. Teacher: Oh really? When did that happen? Teacher: Dick , how are you today?

142 = Teacher defers response, or refuses to respond, when it is clear that she has heard the child. Includes, I don't know, Not now.

143 = Teacher responds with sarcasm.
e.g., Oh, really? As if I didn't know!

Concern

151 = Teacher shows concern for the welfare or well-being of a child.
e.g., What's the matter? Are you all right? Why are you feeling bad? I hope you're feeling better today. Better take care of yourself.

Affection

161 = Teacher shows affection for a child.
e.g., I love you, too! You're my little girl! Includes physical affection such as hugging, etc.

Variable	Code
	N.B. for Child and Teacher Behaviors. In any given row of interaction between the teacher and a single child, up to three child behaviors and three teacher behaviors may be coded, as long as the topic of the interaction has not changed. All of these must have occurred within the 30-second time frame of observation, and must be part of the same interaction chain between the teacher and the child. If the topic changes, the interaction should be coded on a new row, and the Link column should be coded.
30. Link	Code this column when more than one row is required to completely code an interaction chain. Number consecutively within the 30-second time unit the rows belonging to a chain.

Sample coded UI protocol

A sample coded Unstructured Interaction protocol is given below.

PAGE 19

1. CLASS ID 4 2. DATE Jan.5 3. OBSERVATION # 6 4. START 9:30 5. STOP 9:45 6. DURATION 15 7. OBSERVER ID 2

8. ACTIVITY CONTEXT 2 Reading 9. ACTIVITY # 3 10. + OF Cs 7 11. WHO? 02 03 04 [✓ 05] 06 07 08 09 [✓ 10] 11 [✓ 12] 13 14 15 16 [✓ 17] [✓ 18] 19 [✓ 20] 21 22 [✓ 23] 24 25 26 27 12. RANK 1 "The Fat Cats"

Time	Init		Recip		Gp.	Topic	Child Behavior			Teacher Behavior			Link	NOTES
32. 1.	0	01	0	0	7	22				32				(From S1 coding sheet)
2.	1	17	0	01	7	54	19			141				
34.	0	01	4	09	50	22				33				(S1 sheet)
35. 1.	0	01	3	11	7	21				32				(S1 sheet)
2.	2	20	0	01	7	2	19			31				
3.	0	01	4	23	7	45	18			34				

Appendix B

Child-Focused Observation Coding System

The main purpose of this observation system is to describe the behavior of selected children during unstructured activities such as individual seatwork or free play rather than in structured contexts such as reading or math groups. The target of observations is the child rather than the teacher. Using a stopwatch, the observer watches the behavior of the selected child for 15 seconds, then describes (for later coding in terms of the child-focused variables below) the observed behavior during the next 15 seconds. Many of the child-focused variables are defined in much the same way as the corresponding child behavior codes in the teacher-focused UI system and permit the user to compare the child's behavior when he is and is not directly interacting with the teacher.

The child-focused coding sheet is formatted to indicate consecutive 15-second time units (horizontal blocks) and identification or behavior dimensions (columns). Each horizontal line of coding corresponds to one 15-second observation unit.

Identifying Information and Behavior Dimensions

Variable	Code
Name and Page number	Name of focus child and consecutive number of the coding sheet.
Date/Time	Date of observation and time at the beginning of the observation or portion (in cases where there is a break in the observation).
Unit number	Consecutive number of the coding unit or line, each line comprising one 15-second observation segment.
Interactive (Inter.)	Whether the focus child interacted verbally or nonverbally with another person or persons or was not interactive. If the child was not interactive, code 0. If the child was interactive, code the identity of person or persons involved using individual ID numbers, initials (e.g. T=teacher; Mr. X=principal/visitor/aide etc.; FS, MA, JL = peers), titles, abbreviations, or other descriptive phrases (e.g. "reading group"; "a boy" or "two girls" if identities are unknown). The exact manner of identification of interactors in this column is left to the coder.
Verbal	Whether the focus child spoke to another person or persons or was silent. If the child was silent, leave the column blank. If the child talked, whispered, shouted etc. to someone other than himself, enter a check mark (✓). Do not enter checks for singing, humming, sound effects, reading aloud, counting, comments to self, noises, etc. Such utterances may be recorded in notations such as

Variable	Code
	"self", "laughs", "uggh!", "Shhh!", "pow! pow!" etc. to indicate that the focus child was not silent although not conversing. If another child, adult, teacher etc. spoke to the focus child who was not verbal, the identity of the speaker (ID number, initials, title, abbreviation) was recorded in the column follwed by a check mark, e.g. "T✓", "RJ✓".
Exhibits Appropriate or Inappropriate Behavior	Whether the child exhibited an appropriate or inappropriate behavior, usually in interaction with others. A code is entered only if such a behavior was observed during the 15-second unit. If only "neutral" behaviors occurred (i.e. those not defined below as appropriate or inappropriate) the column is left blank.

Appropriate child behaviors
Code a plus (+) in this column if any of the following was observed.

From UI coding system, Variable 28, codes 11-18, 51, 52, and 56 (see Appendix A for expanded definitions):
-teaching, helping others, offering help
-acceptance of values, rules
-enthusiastic comments, sharing ideas
-exhibition of pride in product or performance
-eagerness to perform
-seeking evaluation of performance
-spontaneous helping, volunteering
-overt compliance to directive or request
-expresses affection, friendship
-expresses humor, enjoys jokes
-apologizes for wrongdoing

Other appropriate behaviors:
-C expresses sympathy, comforts another (e.g. Does it hurt very much? Don't cry, we can fix it.)
-C shares, lends own things, gives things away (e.g. You can borrow my crayons. This cookie is for you.)
-C encourages, praises others (e.g. Wow, did you make this? You got all the right answers! You can do it.)
-C invites others to join in, includes others (e.g. You can play too. Wait for Mary.)

Inappropriate child behaviors
Code a minus (-) in this column if any of the following was observed.

From UI coding system, Variable 28, codes 31-35 and 41-44 (see Appendix A for expanded definitions):
-C complains
-tells tales, tattles, threatens to tattle
-makes excuses
-bosses other children, threatens them

Variable	Code
	-denies wrongdoing -resists authority -displays aggression, roughhouses, fights -disrupts other children, class or group.(by loud talking, noise, running around) Other inappropriate behaviors: -breaks rules (e.g. leaves the room) -teases, torments, insults children, calls them names -excludes other child from play (e.g. Go away. Don't bother us. None of your business.) -refuses help (e.g. I'm not telling you.) -criticizes other child (e.g. You made a big mess.) -threatens child (e.g. I'll beat you up.) -pouts, sulks, stews, is in bad mood (e.g. C broods, mutters to self, has a tantrum)
Receives Appropriate or Inappropriate Behavior	Whether the child was the recipient of appropriate or inappropriate behavior directed to him by other children or of positive or negative teacher reinforcement. Code a + or - for the appropriate or inappropriate behaviors defined above or for positive or negative teacher reinforcement defined below. If none of these were addressed to the focus child, the column is left blank. Positive teacher reinforcement From UI coding system, Variable 29, codes 31, 51, 61, 92, 131, 151, and 161 (see Appendix A for expanded definitions): -T encourages, reassures child -T offers positive inducement, incentive -T gives permission -T praises child, shows approval -T shares humor, jokes with child -T shows concern for child -T shows affection Negative teacher reinforcement From UI coding system, Variable 29, codes 34-36, 52, 63, 74, 94, 142, 143 (see Appendix A for expanded definitions): -T inhibits child, directs not to do -T reprimands, scolds -T scolds harshly, punishes -T threatens punishment -T refuses permission -T refuses help -T criticizes child -T refuses response, defers response -T responds with sarcasm NOTE: The child may exhibit and be the recipient of positive and/or negative behavior/reinforcement in a

Variable	Code
	single 15-second observation, e.g. child and peer call each other names (-/-) or share toys (+/+); child lends peer a book, peer throws it on the floor (+/-).
Child Activities: Work Play Talk Self-Care Idling Wild/Disorderly	The predominant activity or event in which the child was engaged. Only one entry (a check mark in the appropriate column) is possible per 15-second unit. If more than one activity occurred equally during a single observation unit, a hierarchical selection is made based on the order of activities given below.
	Work. Any academic task or quiet, constructive activity such as paperwork, coloring, drawing, reading a book, doing a puzzle, listening to a story, cleaning up. Included are class rituals such as the Pledge of Allegiance, lunch count, singing songs. The child may be interactive (e.g. C and peer discuss phonics paper) or non-interactive. If child is preparing to work (e.g. arranging papers, choosing a crayon, borrowing an eraser etc.), code Work. If child is looking at and listening to others working or discussing work (e.g. Teacher helps another, C looks on; children compare drawings, C listens), code Work.
	Play. Any concentrated "fun" activity such as play with toys and objects (e.g. clay modeling), games, make-believe, role playing, Simon Says, etc. Does not include unfocused, restless or daydreaming behavior which is coded as Idling. The child may be interactive and/or talking, or non-interactive in the context of Play. Preparation for play is also coded as Play.
	Talk. All social chitchat, comments other than about work, general conversation. The child may be talking or simply listening silently to another addressing him. Talk is coded when talking is the main activity, whereas talk related to the larger context of work or play is coded as Work or Play.
	NOTE: Coding decisions are based on what the child is actually doing, not on what he *should* be doing. Thus, if a child is supposed to be working on a math paper but instead discusses Star Trek with his neighbor, then Talk is the correct coding.
	Self-Care. Taking care of personal needs such as going to the bathroom, tying shoelaces, getting a drink of water, hanging up clothes, dressing/undressing, grooming, getting one's lunchbox, etc.
	Idling. No clear activity. Child is doing nothing in particular. Includes daydreaming, staring, fidgeting, wandering about, looking around etc. Child is off-task,

Variable	Code
	passing the time or fooling around when he should be busy (occupied). Not to be confused with Play.
	Wild/Disorderly. Clearly disruptive, aggressive, or out-of-place activity. Includes running around the room, chasing children, wrestling, fighting, hitting, kicking, climbing on things, jumping, noisiness, rowdiness (e.g. C pounds on furniture), other unruliness (e.g. C hides in coat closet).
	No Code. Any activity which is not codable in terms of the previous 6 variables, e.g. transitional activities other than preparation for work or play such as getting on line, waiting one's turn, or standing by waiting for the teacher's attention. Occasionally the child may be receiving a scolding or defending himself against aggression. The No Code is used in any unusual or ambiguous situation.
	Hierarchical coding decisions. When two or more activities seem to occur equally often or to be of equal duration in a 15-second observation unit such that no one activity is clearly predominant, coding is determined by a hierarchy proceeding downward from Work through Wild/Disorderly. For example, a child may alternately work and daydream (idle) for 15 seconds; the correct code is Work. The child may stop to blow his nose (self-care) during a card game; the correct code is Play.
Notes	A space is provided at the right of each coding line for comments or notations the coder may wish to make.

Sample coded child-focused protocol

A sample coded Child-Focused Observation protocol is given below.

NAME: Jim Jones PAGE: 1

Date/Time	Unit	Inter.	Verbal	Exhibits +/−	Receives +/−	Work	Play	Talk	Self-Care	Idle	Wild	No Code	Notes
4/28/76	1	0				✓							C colors paper
9:00 a.m.	2	0				✓							Colors
Morning	3	0	sings			✓							Works, taps fe
paperwork	4	AB	✓			✓							"Look at my paper!
	5	AB	✓					✓					Chat re birthda
	6	T	T✓		−							0	T scolds C for nois
	7	0				✓							colors, yawns
	8	0								✓			Stares out windo
	9	0								✓			Chews penci
	10	CD	✓	+									Gives help to CD
	11	0				✓							Works, makes
	12	0	self			✓							Reads aloud to sel
	13	0							✓				Ties shoelace
	14	0				✓							Chooses crayo
	15	0	oh rats!			✓							Breaks crayo
—	16	T	✓			✓							"I'm finished
	17	EF	✓				✓						Cs play w/blocks
	18	EF	✓	−			✓						Knocks over EF's
	19	EF	✓	−	−						✓		Cs wrestle, fight
	20	T	T✓									0	T calls C to re
etc.													

Appendix C

Supplementary Statistical Information

I. Frequencies of individual items included in SI and UI manuals

For the convenience of the reader who may be interested in using the SI or UI coding system we present below the frequency with which each variable listed in the manuals was coded in each classroom in this study along with the percentage of SI or UI interaction units in which the variable was coded. These data should be of help to researchers who wish to modify the instruments by eliminating low frequency items or clustering items.

Structured Interaction Coding System[a]

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
19. Interaction Topic:								
1=Subject lesson	82	5.8	91	6.1	25	3.4	20	3.6
2=Reading/phonics	1217	86.6	1236	83.1	336	46.3	400	71.4
3=Math	80	5.7	70	4.7	227	31.3	94	16.8
4=Penmanship	9	0.6	59	4.0	1	0.1	0	0
5=Other	0	0	8	0.5	6	0.8	15	2.7
6=Seatwork	1	0.1	18	1.2	71	9.8	0	0
7=Show and tell	6	0.4	0	0	49	6.8	14	2.5
20. Question/Demand Mode:								
Direct	1041	74.1	1284	86.3	538	74.2	484	86.4
Open	347	24.7	150	10.1	125	17.2	45	8.0
Call out	17	1.2	54	3.6	61	8.4	31	5.5
21. Question/Demand Type:								
Process	69	4.9	278	18.7	85	11.7	35	6.3
Product	1276	90.8	1200	80.6	598	82.5	501	89.5
Choice	0	0	1	0.1	1	0.1	0	0
Free	60	4.3	8	0.5	41	5.7	24	4.3
22. Assessment:								
No Response	97	6.9	135	9.1	51	7.0	42	7.4
Response	645	45.9	430	28.9	138	19.0	198	35.4
Correct/Complete	476	33.9	629	42.3	384	53.0	239	42.7
Partially Correct	9	0.6	8	0.5	28	3.9	6	1.1
Incorrect/Incomplete	174	12.4	285	19.2	124	17.1	75	13.4
23. Evaluation:								
High praise	75	5.3	47	3.2	29	4.0	0	0
Mild praise	163	11.6	58	3.9	110	15.2	28	5.0
Praise and criticism	1	0.1	1	0.1	2	0.3	0	0
Criticism	4	0.3	7	0.5	1	0.1	0	0

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
24. Terminal Feedback:								
Process	4	0.3	14	0.9	10	1.4	4	0.7
Product	32	2.3	24	1.6	23	3.2	10	1.8
Other	45	3.2	94	6.3	21	2.9	13	2.3
Call out	5	0.4	8	0.5	2	0.3	7	1.2
25. Sustaining Feedback:								
Repeat	60	4.3	78	5.2	47	6.5	32	5.7
Clue	82	5.8	65	4.4	25	3.4	45	8.0
New question	210	14.9	141	9.5	129	17.8	55	9.8
26. Global Evaluation	17	1.2	9	0.6	10	1.4	4	0.7
Total SI Interactions	1405		1488		725		560	

Unstructured Interaction Coding System[a]

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
19. Interaction Topic:								
Academic								
1=Subject lesson	0	0	0	0	5	0.3	4	0.2
2=Reading/phonics	196	16.9	359	23.2	113	7.9	217	12.8
3=Math	38	3.3	34	2.2	156	10.9	76	4.5
4=Penmanship	23	2.0	27	1.7	26	1.8	0	0
5=Other	2	0.2	1	0.1	25	1.7	25	1.5
6=Seatwork	52	4.5	26	1.7	63	4.4	66	3.9
7=Show and tell	0	0	0	0	28	1.9	36	2.1
Non-academic								
8=T-suggested activity	41	3.5	52	3.4	25	1.7	70	4.1
9=C-chosen activity	11	0.9	26	1.7	15	1.0	23	1.4
10=Conversation	45	3.9	64	4.1	44	3.1	36	2.1
Other								
11=Recreation	0	0	0	0	3	0.2	14	0.8
12=Transition	1	0.1	1	0.1	1	0.1	1	0.1
13=Morning Routine	0	0	0	0	0	0	5	0.3
Procedure								
21=Work-related	161	13.9	210	13.5	218	15.2	237	14.0
22=Class management	360	31.1	279	18.0	462	32.2	510	30.1
23=Self-care	20	1.7	30	1.9	32	2.2	22	1.3
Privilege								
24=Privilege	37	3.2	41	2.6	56	3.9	85	5.0
Child behaviors								
Appropriate								
31=Teaching/helping	2	0.2	10	0.6	1	0.1	1	0.1
32=Acceptance of values	1	0.1	2	0.1	1	0.1	1	0.1

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
33=Enthusiasm	0	0	0	0	0	0	0	0
34=Exhibition of pride	0	0	0	0	1	0.1	0	0
35=Seeking to perform	2	0.2	1	0.1	2	0.1	1	0.1
36=Seeking evaluation	0	0	0	0	1	0.1	0	0
37=Spontaneous helping	0	0	0	0	0	0	0	0
38=Overt compliance	1	0.1	0	0	0	0	0	0
Inappropriate								
41=Defiance	0	0	7	0.5	0	0	2	0.1
42=Aggression	1	0.1	3	0.2	2	0.1	10	0.6
43=Disruption of Cs	26	2.2	62	4.0	19	1.3	14	0.8
44=Disruption of class	81	7.0	190	12.3	95	6.6	146	8.6
45=Off-task	30	2.6	98	6.3	30	2.1	73	4.3
Distress								
46=Distress/fear	1	0.1	5	0.3	2	0.1	4	0.2
Personal quality								
51=Intellectual	0	0	1	0.1	0	0	0	0
52=Social/leadership	3	0.3	1	0.1	0	0	1	0.1
53=Appearance	0	0	1	0.1	1	0.1	1	0.1
54=Health	23	2.0	14	0.9	9	0.6	12	0.7
Expressive quality								
61=Happiness	1	0.1	4	0.3	0	0	0	0
62=Bad mood	0	0	1	0.1	0	0	0	0
28. Child Behavior:								
Appropriate								
11=Teaching/helping	0	0	10	0.6	3	0.2	0	0
12=Acceptance of values	1	0.1	3	0.2	5	0.3	0	0
13=Enthusiasm	4	0.3	17	1.1	5	0.3	4	0.2
14=Exhibition of pride	2	0.2	15	1.0	12	0.8	6	0.4
15=Seeking to perform	11	0.9	23	1.5	9	0.6	16	0.9
16=Seeking evaluation	33	2.8	40	2.6	83	5.8	40	2.4
17=Spontaneous helping	5	0.4	4	0.3	5	0.3	5	0.3
18=Overt compliance	7	0.6	9	0.6	22	1.5	23	1.4
19=Comments	87	7.5	129	8.3	140	10.0	130	7.7
Requests								
21=Information	39	3.4	96	6.2	63	4.4	156	9.2
22=Help	19	1.6	120	7.7	32	2.2	78	4.6
23=Materials	7	0.6	9	0.6	13	0.9	10	0.6
24=Permission	31	2.7	39	2.5	34	2.4	45	2.7
Mild inappropriate								
31=Complains	5	0.4	18	1.2	13	0.9	21	1.2
32=Tattles	11	0.9	51	3.3	17	1.2	12	0.7
33=Makes excuses	1	0.1	4	0.3	6	0.4	13	0.8
34=Bosses others	0	0	2	0.1	1	0.1	0	0
35=Denies wrongdoing	1	0.1	3	0.2	2	0.1	1	0.1
Clearly inappropriate								
41=Defiance	0	0	8	0.5	4	0.3	27	1.6
42=Aggression	1	0.1	1	0.1	1	0.1	4	0.2
43=Disruption of Cs	10	0.9	21	1.4	7	0.5	8	0.5

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
44=Disruption of class	25	2.2	65	4.2	40	2.8	67	4.0
45=Off-task	20	1.7	52	3.4	16	1.1	59	3.5
Expressive								
51=Affection	2	0.2	2	0.1	0	0	0	0
52=Humor	2	0.2	19	1.2	2	0.1	0	0
53=Sympathy	0	0	3	0.2	0	0	1	0.1
54=Shyness	0	0	1	0.1	2	0.1	0	0
55=Distress	0	0	3	0.2	2	0.1	2	0.1
56=Apology	0	0	0	0	0	0	1	0.1
29. Teacher Behavior:								
Teaching								
11=States rules	7	0.6	6	0.4	5	0.3	2	0.1
12=Instructs/explains	67	5.8	82	5.3	90	6.3	116	6.9
13=Gives information	40	3.5	55	3.5	58	4.0	91	5.4
14=Routine information	20	1.7	58	3.7	43	3.0	103	6.1
Checks up/questions								
21=Procedural	57	4.9	81	5.2	139	9.7	145	8.6
22=Understanding	0	0	7	0.5	9	0.6	9	0.5
23=Asks C to report	1	0.1	0	0	0	0	0	0
Controls/directs								
31=Encourages/reassures	22	1.9	21	1.4	22	1.5	23	1.4
32=Directs to do	454	39.2	284	18.3	496	34.5	509	30.1
33=Gives choice	2	0.2	0	0	0	0	2	0.1
34=Directs not to do	136	11.7	328	21.2	158	11.0	220	13.0
35=Reprimands/scolds	27	2.3	121	7.8	55	3.8	116	6.9
36=Scolds harshly	0	0	1	0.1	0	0	6	0.4
Justification of action								
41=Objective reason	1	0.1	0	0	1	0.1	2	0.1
42=Appeals to rules	6	0.5	5	0.3	3	0.2	3	0.2
43=Appeals to authority	0	0	1	0.1	0	0	2	0.1
Consequences								
51=Positive inducement	0	0	1	0.1	4	0.3	8	0.5
52=Threatens punishment	1	0.1	28	1.8	6	0.4	22	1.3
Permission								
61=Gives permission	46	4.0	28	1.8	45	3.1	52	3.1
62=Defers permission	8	0.7	6	0.4	5	0.3	7	0.4
63=Refuses permission	17	1.5	21	1.4	16	1.1	29	1.7
Help								
71=Gives help/materials	122	10.5	132	8.5	102	7.1	141	8.3
72=Questions C	3	0.3	12	0.8	4	0.3	11	0.6
73=Defers help	6	0.5	29	1.9	9	0.6	22	1.3
74=Refuses help	2	0.2	11	0.7	7	0.5	12	0.7
Feedback								
81=Correct/complete	7	0.6	25	1.6	21	1.5	12	0.7
82=Partly correct	3	0.3	8	0.5	17	1.2	2	0.1
83=Incorrect/incomplete	21	1.8	25	1.6	30	2.1	12	0.7

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
Evaluation								
91=High praise	24	2.1	23	1.5	19	1.3	8	0.5
92=Praise	35	3.0	41	2.6	49	3.4	39	2.3
93=Praise and criticism	2	0.2	2	0.1	1	0.1	1	0.1
94=Criticism	5	0.4	31	2.0	15	1.0	7	0.4
95=Accepts apology	0	0	1	0.1	0	0	1	0.1
96=Refuses to evaluate	0	0	0	0	0	0	0	0
Sustains task								
101=Repeats question	3	0.3	1	0.1	5	0.3	1	0.1
102=Directs to new task	4	0.3	0	0	5	0.3	1	0.1
Participates								
111=Joins in activity	27	2.3	3	0.2	5	0.3	4	0.2
Listens								
121=Listens silently	5	0.4	20	1.3	11	0.8	6	0.4
Teasing/joking								
131=Shares humor	3	0.3	28	1.8	2	0.1	1	0.1
Conversation								
141=Converses with C	59	5.1	78	5.0	75	5.2	61	3.6
142=Defers response	5	0.4	16	1.0	18	1.3	8	0.5
143=Sarcasm	0	0	6	0.4	1	0.1	0	0
Concern								
151=Shows concern	6	0.5	11	0.7	8	0.6	8	0.5
Affection								
161=Shows affection	1	0.1	7	0.5	0	0	1	0.1
Total UI Interactions[b]	1159		1550		1437		1693	

[a] The reader's attention is drawn to the fact that these calculations are different from the ones reported in Chapter VI, Tables 4, 5 and 6. These latter tables use the total number of teacher or child behaviors as the base for calculating percentages, thus controlling for the wide variations across classes in the total number of teacher behaviors recorded in the SI and teacher and child behaviors recorded in the UI. The procedure used in the above table does not control for this variation but has other advantages.

[b] All coded UI interactions including those addressed to a group of more than 3 children or to the whole class.

II. Variable clusters

Listed below are the items that were summed together to produce the composite variables referred to in Chapter VI, Table 3 and Tables 7-10. The items included in a composite variable may occur in the SI and/or the UI system, the rationale for summing them being their conceptual similarity. However, if more than one code signalling the same composite variable occurred in a single interaction, only one entry was accepted for that composite variable. This procedure ensured that the same composite variable was not counted more than once for a single interaction and that the data base (the number of SI plus UI interactions) was the same for all variables.

Items Composing Variable Clusters

Clusters	SI Variables	UI Variables
Interaction Topics	Variable 19, sum:	Variable 19, sum:
Academic	codes 1-7.	codes 1-7
Non-academic		codes 8-13
Procedure		codes 21-23
Privilege		code 24
Appropriate C behavior		codes 31-38
Inappropriate C behavior		codes 41-45
Health, distress		codes 46, 54.
Appropriate C behavior		Variable 28, sum codes 11-18.
Positive T reinforcement[a]	Variable 23, sum codes High praise and Mild praise.	Variable 29, sum codes 51, 91, 92, 131, 151, 161.
Expressive C behavior		Variable 28, code 19.
T humor, conversation[a]		Variable 29, sum codes 111, 131, 141, 161.
T asks open/free question	Sum variable 20, code Open and variable 21, code Free.	Variable 29, code 33.
Dependent C behavior		Variable 28, sum codes 21, 22, 23, 24.
T grants request		Variable 29, sum codes 61, 71.
T rejects request[b]		Variable 29, sum codes 62, 63, 73, 74.
Inappropriate C behavior		Variable 28, sum codes 31-35 and 41-45.
Negative T reinforcement[b]	Variable 23, sum codes Praise and criticism and Criticism.	Variable 29, sum codes 34, 35, 36, 52, 63, 74, 93, 94, 142, 143.

Clusters	SI Variables	UI Variables
T asks process question	Sum variable 21, code Process and variable 24, code Process.	Variable 29, code 72.
T asks product question	Variable 21, sum codes Product and Choice.	
T does not assess response	Variable 22, code Response.	
T assesses response	Variable 22, sum codes Correct, Partially correct and Incorrect.	Variable 29, sum codes 11-13 and 81-83.
T gives directive	Sum variable 20, code Direct and variable 25, all codes.	Variable 29, sum codes 31, 32, 101, 102.
T procedural behavior		Variable 29, sum codes 14, 21, 22.
Variables ommitted from clusters		
Interaction Topics		Variable 19, codes 51-53 and 61-62.
All others	Variable 20, code Call out; variable 22, code No response; variable 24, codes Product, Other and Call out; variable 26.	Variable 28, codes 51-56; variable 29, codes 23, 41-43, 95, 96, 121.

[a] Two UI variables were inadvertently included in two different variable clusters but because of their low frequency the data analysis was not significantly affected.

[b] See footnote a, above.

III. Frequencies of variable clusters

Listed below are the frequencies of composite variables defined in Table II above along with the percentage of combined SI and UI interaction units in which the variables were coded in each classroom. As noted in Table II, only one entry per composite variable was counted when more than one code signalling the same cluster occurred in a single interaction. In addition, all UI interactions directed by the teacher toward a group of children or the whole class were omitted from the analyses of combined SI and UI interactions.

SI and UI Composite Variables

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
Interaction Topics								
Academic	1655	69.6	1883	65.3	1077	54.6	900	45.6
Non-academic	90	3.8	135	4.7	73	3.7	114	5.8
Procedure	438	18.4	442	15.3	617	31.3	635	32.2
Privilege	36	1.5	41	1.4	55	2.8	84	4.3
Appropriate C behavior	6	0.3	13	0.5	6	0.3	3	0.2
Inappropriate C behavior	132	5.5	350	12.1	133	6.7	220	11.2
Health, distress	22	0.9	19	0.7	11	0.6	16	0.8
Appropriate C behavior	63	2.6	121	4.2	144	7.3	93	4.7
Positive T reinforcement	305	12.8	206	7.1	217	11.0	85	4.3
Expressive C behavior	85	3.6	125	4.3	141	7.1	126	6.4
T humor, conversation	80	3.4	113	3.9	78	4.0	62	3.1
T asks open/free question	392	16.4	158	5.5	162	8.2	58	2.9
Dependent C behavior	96	4.0	262	9.1	144	7.3	280	14.2
T grants request	143	6.0	142	4.9	144	7.3	174	8.8
T rejects request	33	1.4	67	2.3	39	2.0	65	3.3
Inappropriate C behavior	74	3.1	220	7.6	107	5.4	205	10.4
Negative T reinforcement	185	7.8	544	18.8	264	13.4	376	19.0
T asks process question	75	3.1	292	10.1	94	4.8	50	2.5
T asks product question	1276	53.5	1203	41.6	599	30.3	501	25.4
T does not assess response	645	27.1	430	14.9	138	7.0	198	10.0
T assesses response	756	31.7	1060	36.7	689	34.9	445	22.5

Variable	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
T gives directive	1505	63.1	1577	54.5	989	50.1	914	46.3
T procedural behavior	71	3.0	140	4.8	170	8.6	234	11.9
Total SI+UI Interactions	2384		2891		1974		1974	
Omitted UI interactions[a]	180		147		188		279	

[a] All UI interactions in which the recipient of the interaction was a group or the whole class rather than an individual child. These interactions were omitted from the combined total of SI plus UI interactions and did not enter into any combined SI/UI analyses.

IV. Frequencies of activity contexts

Listed below are the frequencies of activity contexts coded in the SI and UI observation systems along with the percentage of the total for each context.

SI and UI Coding Systems

Activity Context	Allen		Prima		Edwards		Ryan	
	n	%	n	%	n	%	n	%
Subject Matter Lesson	0	0.0	0	0.0	2	2.3	2	1.7
Reading and Phonics	149	75.3	68	77.3	25	28.7	56	47.5
Math	13	6.6	4	4.5	15	17.2	14	11.9
Penmanship	2	1.0	2	2.3	2	2.3	0	0.0
Other Academic Work	0	0.0	0	0.0	4	4.6	2	1.7
Seatwork, Paperwork	4	2.0	5	5.7	16	18.4	6	5.1
Self-Reference Recitation	0	0.0	0	0.0	7	8.0	1	0.8
Non-Academic Activity Suggested by Teacher	5	2.5	3	3.4	7	8.0	5	4.2
Non-Academic Activity Chosen by Child	2	1.0	0	0.0	1	1.1	2	1.7
Conversation	0	0.0	0	0.0	0	0.0	0	0.0
Rest and Recreation	1	0.5	0	0.0	0	0.0	5	4.2
Transitions	22	11.1	6	6.8	8	9.2	14	11.9
Morning Routine	0	0.0	0	0.0	0	0.0	11	9.3